An Address
ON
MENTAL ABILITIES AND DISABILITIES OF CHILDREN.

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LADIES AND GENTLEMEN,—There is a valuable literature of school hygiene and we have many useful books dealing with the prevention of illness and the cultivation of health during the period of school life and in the schoolroom. School hygiene in this aspect has been pursued by many workers as far as possible on the basis of the exact sciences, employing methods of inquiry, observation, and description as in other branches of physical science; facts seen are recorded, analysed, and summarised, while methods of experimental research have corrected and added exactness to the knowledge first obtained. School hygiene has led to valuable results in the prevention of disease and the early detection of illness by tracing the connexion between school life and the prevention of epidemics. Such means have done much to promote the *corpus sanum*; it is desirable that we should follow the same methods of natural science in studying the health and mental abilities and disabilities of children. A large field for inquiry and study is here presented as supplemental and co-relative to the psychological aspect of mental training and school life. Among many other sections of this subject we might study mental aptitude and mental disabilities or causes of mental dulness in children; mental weariness and brain fatigue; mental confusion and abnormal concomitant conditions; defects of memory and means of removing them; reversion in mental states and childish faults; and mental breakdown at adolescence and its connexion with previous training. A large number of other questions and many propositions bearing on the mental status of children might be mentioned. All these subjects may be investigated on the same lines as those used in studying school hygiene in its concern with bodily health—that is, by direct observation of children and record of the facts seen.

Mental aptitude or the potentialities for mental training are indicated in a child in whom we observe spontaneity of action easily controlled through the senses and regulated by impressions received; spontaneity of movement, liveliness in facial expression, talkativeness, with capacity to follow organised games and occupations are hopeful signs. When these are accompanied by good imitative power in action and in speech, with retention of what has been acquired and more exact repetition after practice, the indications of educable brain power are distinctly present. The cultivation of each individual sign of such aptitude, first separately, then collectively, may be advisable; this is specially the case when one item is deficient, as, for example, where some form of spontaneity is not easily coördinated—it may be restless eye-movements or finger twitches which lead to incorrect observation and poor manipulative ability. These points I have described in detail elsewhere.[1]

The subject of mental fatigue has been investigated by many accurate observers on experimental lines: at one period a great deal was said on "over-pressure," sometimes, I venture to think, without sufficient analysis of the many causes which may produce exhaustion. Weariness may be due to many circumstances; much might be said as to the effects of muscular exercise, ventilation, diet, conditions of the blood and of the circulation, &c., in producing fatigue; but I wish here to keep as closely as possible to the consideration of brain conditions leading to fatigue and exhaustion. The signs of brain fatigue are easily observable in the movement and balance of the parts of the body, especially as seen in the face, the eyes, and in finger action. In brain fatigue the force expended in movements is small in amount and the total number of movements may be lessened, while action in the child is less easily and regularly controlled through the senses. At the same time, a certain number of irregular movements, spontaneous or not stimulated by directions, may occur, suggesting that the fatigued child is reduced to a more childish condition of spontaneity than when his brain is fresh and healthy; thus, the eyes may often move in the horizontal direction uncontrolled by sight or sound, or the fingers as he holds his pen, or when the hands are held out, or as he fidgets without doing his work. Loss of force or nerve-tone is indicated by the lessening of facial expression, fulness or bagginess under the eyes, to which may be added spontaneous knitting of the eyebrows or corrugation. The hands when held out free in front are usually at an unequal level and droop in the fingers, while the head may drop to one side and the shoulders be unequally balanced. In such a child all movement in response is slow and inaccurate as well as the speech and the signs of mental action.

The chief means of preventing exhaustion lie in the early recognition of the signs of fatigue, which may appear first either in mental response or in motor signs. It is quite possible for a trained pupil showing considerable signs of brain fatigue to continue good mental work, as during an examination, but there is peril in prolonged periods of brain fatigue without recreation. I will not say that fatigue is always to be avoided, but the day's fatigue should be recruited by the night's rest.

It must be remembered that "mental fatigue" is used in physiology as a term intended to express the amount of brain (cortex) energy spent in mental processes. It is the amount of physiological work done among the brain-cells (psychosis) that we intend to express, not the number of movements or amount of movement employed in its expression by words or action. Still less is the physiological energy spent among the nerve-cells to be estimated by the value we as educated persons put upon the usefulness of the outcome. It may be doubted whether we can determine the quantity of mental action occurring in a given time or whether any unit for quantitative comparison exists, this cannot be represented by the value of the work done. It is only the mental action which is expressed that we can estimate quantitatively—not the quantity of brain action; many thoughts may arise and be inhibited in the brain not expressed; in some difficult processes of thinking this occurs to a large degree, especially in original work and in thinking out cause and effect or in seeking illustrative examples. The time and order of succession and adhesion of mental acts has more to do with the character of mental processes than the quantity of brain-energy expended. Thoughts of real value, like actions, depend on their coördination by circumstances, not upon the degree of brain-wear expended. Estimation of the value of intellectual acts in the child and adult differs so greatly as to make comparison difficult. They may, however, be more easily contrasted. In the child the impressions retained are less exact; spontaneity is more abundant and may interfere with any established order of thoughts. Such spontaneous thoughts as brain-work may add to mental fatigue. There exist but few established modes of thought to come into play leading to any conclusion. Effective training lessens brain fatigue.

From the point of view of mental hygiene attention and mental confusion may be contrasted, together with the means of cultivating the former and avoiding the latter. In making observations for the purpose of determining the modes of brain action corresponding to a mental act of attention we must directly observe the motor expression in the child. Spontaneous movement is equally characteristic of young animals and young children. A dog going out for a walk with his master evinces his joy in spontaneity by running in the field and making ever wider circles or ellipses; he may return to his master and then recommence his career till seeing a cow he barks at her but is again recalled by his master's voice. At length he runs at the cow and teases her. Spontaneous action is here the primary mode of energy displayed; it becomes controlled and coördinated partly by the master's voice, in part by the sight of the cow; these controlling forces act in different proportion. This strongly resembles the movements of the root of a seedling bean in its circumnutation, wandering in ellipses, while under control or guidance of impressions received at or near its apex, obstructions to its downward growth are avoided.[2]

[1] Study of Children and their School Training. London: Macmillan.

[2] C. Darwin: Movements of Plants, pp. 420, 422, and 427.

Spontaneous brain action is the basis of mental power. In the infant at birth, as in the adult during quiescent states, the respiratory movements occur in a uniform series; while the child is awake spontaneous movements are seen in the limbs, especially in the small parts, the fingers and toes, but they occur in no apparent order and are not uniform in character; further, they are not controlled by the senses. Spreading area of brain action is seen in movements when the child cries. When three months old some control of these movements may be seen as the child is impressed by sight or sound; this is the earliest manifestation of potentiality for mental action; still there is no delayed expression of impressions received and no act of choice is observed. At birth no signs of mental attention are seen, the infant shows many spontaneous movements corresponding to spontaneous action in many brain-centres, but these are not controlled through the senses. Later in the evolution of the infant this spontaneity may be momentarily arrested by impressions received through the organs of sense; show the infant a coloured object and coördinated action follows; spontaneity of movement is quelled for a few seconds, then the object is grasped by a prehensile action. During the period of quiescence there is said to be an act of attention followed by adapted action. The brain processes during the quiescence (period of inhibition and diatactic action)[3] then appear to be a pre-adjustment of the brain-centres which is expressed by the adapted act of prehension. The physiologist cannot admit that the will thus arranges the brain; this act of attention results from the sight of the object. The brain conditions necessary to an act of attention are (1) healthiness in the general characters of the brain; (2) spontaneity; and (3) control of the brain by an impression through the senses, as shown by inhibition and the coördinated action following. Attention as a physiological process is inferred to be action among the brain-centres and may occur with or without subsequent expression. The school-child must be tolerably quiet before he will think connectedly; a pause for thought is required in thinking over the answer to a question; there may be an expression indicating understanding without any verbal response. Sometimes attention is best arrested by sight only; other pupils may be more easily impressed by hearing the spoken word.

In cultivating the faculty of attention we need spontaneity in the brain which is the foundation of mental power; we must produce some impression on the brain and for the sake of exactness and simplicity in training a slight impression through one sense organ only is at first advisable; this is especially the case with difficult children. The impression must be distinctly produced before a full act of attention can follow; the object must be looked at for some seconds before it is completely seen, as the figure in a proposition of Euclid, hence irregular eye-movements may interfere with attention. An excess of spontaneous brain action and any spreading area of activity such as corresponds to a number of disconnected thoughts may be indicated by a number of extra movements or fidgeting and vague, disjointed response in place of the signs of attention. This is often observable with the signs of fatigue in restless movements of the eyes, the fingers, and the feet.[4]

The modes of brain action may not be sufficiently well balanced or proportioned at the stage of evolution of the child to allow of uniform or prolonged attention. A pupil may at times show marked mental confusion and make an absurd reply to a question. This may arise from several causes. 1. When a spreading area of spontaneous action in the brain is indicated by fidgeting while the child turns his head and his fingers twitch, he may ejaculate words irrelevant to the question, yet thoughts may be arising, though not under direction. Such spreading and spontaneous brain action shows the need of further training; it may also accompany other signs of fatigue. 2. Eye-movements need training in order that the impressions received by the brain may be exact. When a child is working an addition sum, as the eyes move to successive figures in a column an extra or lateral eye movement may bring into view the wrong figure and lead to confusion. 3. In reading eye-movements may similarly bring the wrong line into view. 4. In writing the pupil may copy the line above in place of continuing his exercise. 5. Confusion may arise from the question being only partially heard, as from deafness; if the child be also short-sighted his difficulties are greatly increased in receiving teaching by demonstration. 6. Rapid action of the heart with a quick pulse is common in nervous children and may be accompanied by other conditions of importance to health. Such disturbance of the circulation may produce marked mental confusion. 7. Sometimes an answer is irrelevant to the question put, yet it contains the reply to a former question, as to which a train of thought has continued. Such delayed expression of thought is not a mindless condition, but shows an untrained mode of mental action. Brain training may do much to prevent mental confusion and increase the power of attention.

Memory depends upon reactivity of the impressions previously made upon the brain; these impressions returning in activity as a series in the same order as that in which they were produced originally. Thus the child, when directed to do so, repeats the numerals in their order of succession as previously taught. This—as a matter of physiological action—depends upon the (cohesion) exactness of the impressions retained and upon adhesion of those impressions, so that energy flows along the pre-arranged nerve-paths from the brain-centre stimulated by your direction to repeat the lesson to those centres which were impressed in succession by previous teaching. Such forms of memory remind us of the exact reproduction of a speech by the phonograph, where the dints made on the wax are retained and reproduce in their former order the vibrations causing sound, without variation or adaptability; no interaction occurs among the impressions on the wax. Overtaxing the faculty of memory producing many fixed impressions, to a certain extent tends to lessen mental adaptability fixing a certain number of impressions for thought and limiting free mental power. A large number of automatic actions lessen the number of movements; idiots often have repeatative movements and but little freedom of action.

[3] See Mental Faculty, p. 39. Cambridge University Press.
[4] See cases, op. cit.

THE PARASITE OF CANCER.

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RECENT papers have re-awakened interest in this country in the question of the parasitic organism of cancer and the time seems opportune for a review of the question. It is not my intention here to argue in support of the infective nature of cancer, but I may state that increasing clinical and pathological experience only deepens my conviction of its infectivity. I am fully aware that many minds are ranged on the other side—they include some of my personal friends; but I console myself by remembering that it took some of my friends almost a decade to accept the bacillus tuberculosis as the etiological factor in tubercle. Accepting as I do the doctrine of infectivity my present purpose is confined to the question of the infective element.

Up to 1890 Albarran, Darier, Thoma, Wickham, and Sjöbring had described structures in the cells of cancer which they believed to be parasitic, and all of them, with the exception of Thoma, regarded the parasite as belonging to the protozoa. In 1890 I published a paper in which I described what I believed to be a parasitic organism in cancer. The organism was described both in an extracellular and an intracellular form. They were held by me to be blastomycetes and I provisionally called them "fuchsin bodies." The subject was taken up with considerable ardour and it was found that bodies similar in appearance to the extracellular forms described occurred in morbid conditions other than cancer. Some of these observations by others were correct, some were wrong, as sufficient allowance was not always made for the care with which I had excluded the possibility of the extracellular forms being some of the things they were said to be. Still the fact remained that identical bodies were found in other morbid conditions and this fact became a stumbling block. After this other work appeared which dealt with the intracellular structures in cancer cells and in which it was attempted to differentiate the intracellular appearances into organisms, degenerations of cell protoplasm, or degenerations of cell inclusions not parasitic. The organism was regarded by these observers as a sporozoon, or at all events

an amœboid parasite. A considerable array of observers, including Bergonzini, Klein, Raum, Hauser, Shattock and Ballance, Goldmann, Rossi, Touton, Mantegazza, Pelagatti, and others contended that the appearances described were the result of degeneration of one kind or another, or of something not parasitic. The variety of explanation has been great and it is not going too far to say that the effect was that the current view has been that all work contending for the parasitic nature of the appearances was either wrong or wrongly interpreted. When Ruffer brought forward his work at the annual meeting of the British Medical Association I stated that I was familiar with all the intracellular appearances and that his preparations were so beautiful that it was vain to continue the subject from the morphological standpoint as nothing more could be made of it; that the two opinions would continue to be held—namely, (1) that they were parasites, and (2) that they were merely degenerations. Experimental work by those whose circumstances permitted them to pursue the subject could alone settle who was right.

Within the past few years experimental work has been gradually determining, as it seems to me, this question. It is to investigators in Italy that we are indebted for its elucidation and it is mainly with the view of bringing the Italian work somewhat fully before the profession in Britain that this paper is written. The honour and credit of the experimental work belongs, in the first place, to Professor Francesco Sanfelice, director of the Institute of Hygiene in the Royal University, Cagliari. Before entering on an account of his work it is necessary to state that when I published my paper the dictum of pathologists was that the blastomycetes were not pathogenic and this authoritative dictum ruled men's minds as dicta of the kind usually do.

Sanfelice's Discovery of a Pathogenic Blastomyces.

Sanfelice's attention seems to have been directed to cancer by what we call chance. He was engaged in investigating the morphological and biological characters of blastomycetes when he found that one of these was pathogenic, and was interesting not from this fact alone but from the further fact of its morphological resemblances to the bodies which had been described as cancer coccidia. He then, apparently, looked more fully into the literature of pathogenic blastomycetes and from this it appears that Neumayer and Raum had both experimentally inoculated animals with pure cultures but without results of importance. Busse had described a case diagnosed as sarcoma of the tibia in which numerous cells were found which Löffler cultivated and pronounced to be blastomycetes. Experimental inoculation with these only proved that the parasite was capable of reproduction in the animal body. Mafucci and Sirleo described a blastomyces obtained from a guinea-pig with which they were able to inoculate other guinea-pigs. This seems to have been the position as regards pathogenic blastomycetes, when Sanfelice had begun the investigations to which special reference is to be made.

The special organism with which Sanfelice experimented he has called the "saccharomyces neoformans." Inoculation of guinea-pigs with it showed that wherever inoculation was performed the result was a general infection of the animal with the formation of tumours, consisting partly of masses of the parasite and partly of proliferation of the cells of the part. The infection spread by the lymph and blood channels and did not cause inflammation. The animals usually died within a month and he noted that in the tissues the parasite had a somewhat different appearance to that which it had in cultures. The appearances of this parasite in the tissues of guinea-pigs had a great resemblance to the bodies found in human malignant growths by many observers. Most of these authors believed these bodies to be coccidia and it was by Russell alone that the bodies were believed to be blastomycetes. In a further paper he continues the account of experimental inoculation of other animals. In mice inoculation led to a rapid infection with great multiplication of the parasite. In white rats the process was slower, the animals dying after from one and a half to two months and with more reaction on the part of the tissues. In rabbits only two out of 12 inoculated died and in the fatal cases the parasites were fewer in number, but there was more proliferation of the tissue elements than in the other animals. Out of 30 dogs inoculated only two developed a tumour at the point of inoculation and metastasis in internal organs. One of these dogs was killed after four months, the other died after 10 months. The pathological changes in the first dog consisted in the development of a nodular tumour in the mammary gland where the inoculation had been made, with enlargement of neighbouring lymph glands. The changes were like those of sarcoma. Very few parasites were found and no cultures could be obtained from any of the tissues. In the second dog the growths were different, but I have so far failed to find an account of the anatomical changes present in it. In fowls the parasite presented a different appearance to the appearance in the other animals.

The Morphological Characters presented by the Blastomycetes when Inoculated into Animals.

In a paper dated September, 1897, on the Experimental Production of Russell's Fuchsin Bodies, Sanfelice says that until that time among the animals he had inoculated with saccharomyces neoformans it was only in dogs that the blastomyces appeared in the typical forms as described by Russell under the name of "fuchsin bodies." Russell described them as certain structures which he could almost always demonstrate in carcinomata. They were almost spherical, 4–12 μ in diameter, homogeneous, and without a trace of structure. They lay almost always in groups of 3–20 elements; some of them were bounded by a thin rim of cell protoplasm, while the majority lay in a clear area in a kind of vacuole. They were met with either in the cancer cells or in the stroma. Russell believed these to be parasites and classed them under the blastomycetes or sprouting fungi. Sanfelice goes on to say that since the previous year he had been inoculating various animals with pure cultures of the saccharomyces neoformans and had noted that in certain cats which died after some months the blastomycetes inside the tissues took the typical forms of Russell's bodies, and in view of the appearance of the works of investigators who denied that Russell's bodies were blastomycetes he proceeds to report on the manner in which the parasites appear in these particular animals. He contends that it is only by experiment that a positive result can be arrived at and it is owing to the fact that observers have depended on morphological features and staining reactions that the majority of observers have arrived at erroneous results. When he ascertained that after injection of pure cultures of saccharomyces neoformans in cats typical Russell's bodies appeared in the tissues he investigated the tissues of normal cats, but in no case found Russell's bodies. After inoculation with saccharomyces neoformans the fuchsin bodies were invariably found, presenting, moreover, the same form and arrangement, and with the same reaction to colouring material as the bodies which Russell and others had described as occurring in malignant tumours.

Sanfelice inoculated 10 cats of different ages in the peritoneal cavity—some once, others oftener. When the cats died, on an average after three months, numerous sections were made of all organs. The pieces of the tissues of normal cats were fixed in the same way as those of the inoculated animals. In this way he demonstrated the fact that Russell's fuchsin bodies appeared in the tissues after the inoculation of cats with saccharomyces neoformans and he describes the structure and arrangement and properties of the bodies he found so as to prove their identity with the bodies regarded by Russell as blastomycetes and by Russell's opponents as products of cell degeneration. In the inoculated cats the fuchsin bodies appear in greatest number in the lymph glands of the mesentery, in the spleen, and in the bone marrow. They are easily recognised, being perfectly round in form and in size varying from that of a micrococcus to that of a leucocyte. As regards structure, some of the bodies show a differentiation of the chromatic substance, while others take on the stain homogeneously, with more or less intensity. The bodies with differentiated chromatic substance possess either a kind of circle or an intensely coloured membrane with a less intensely coloured central part, or they show a deeply coloured centre surrounded by a circle only faintly coloured, or not coloured at all, and varying in breadth. The homogeneously coloured forms take on a more or less deep colour. In many of the parasites multiplication by budding may be seen in the same way as is seen in artificial cultures. The buds grow from the smaller elements as well as from the larger, and may or may not remain attached until they attain the full size.

In the tissues of cats the blastomycetes are found either lying free or inside the cells. The free forms lie between

newly formed cell elements and usually in groups, seldom singly. The number of parasites in one group varies. Sanfelice has counted as many as 30 in one group. Sometimes these are so closely clustered as to present a mulberry appearance, sometimes they lie separated from each other and, moreover, at such equal distances that they have the appearance as if some cement substance kept them at equal distances and prevented direct contact of the deeply-coloured substances. Occasionally one can see quite distinctly that this apparent cement substance is formed from the circles of hyaline membranes which by touching each other conceal the outlines of their peripheries. In some groups of blastomycetes the hyaline membranes are very apparent and their borders are distinctly seen. The endocellular parasites are usually much smaller than the free forms. If there are only one or two in a cell they are moderately large: if many they are small. The number of enclosed parasites varies, as do the free forms, and they present the same appearances. According to the position in which the cell containing the parasites is seen by the observer the nucleus appears either pushed to one side or in the centre of the cell surrounded by parasites. It often happens that small parasites in considerable numbers are found lying close together in a ground substance without any nucleus being visible. It is possible that in such cases the nucleus is lying under the parasites so that the eye of the observer cannot detect it. Another feature is the fact that they are found in the neighbourhood of young, newly-formed cells and do not appear in the parts where the cells are undergoing degeneration. He is unable at present to say why the parasites should appear in the form of fuchsin bodies only occasionally in dogs though constantly in cats. He concludes by stating that this communication is intended to prove (1) that all authors who contend that Russell's fuchsin bodies are not blastomycetes have not hitherto brought forward experimental proof that they are cellular degenerations; (2) that through the inoculation of cats with pure cultures of saccharomyces neoformans the typical bodies are produced which have been described by Russell and others as occurring in malignant tumours in man and in certain chronic inflammatory processes; and (3) that these fuchsin bodies are not found in normal cats, but only appear in these animals when they are inoculated with pure cultures of saccharomyces neoformans, or with pieces from the tissues of cats, containing the typical forms of Russell's bodies. A coloured plate illustrating the various forms of the parasite is appended to Sanfelice's paper. It may simplify this question to say here that he states that the pathogenic blastomycetes hitherto cultivated closely resemble one another on artificial media and in morphological appearances, while at the some time their pathogenic action varies widely.

The Experimental Production of Epithelial Tumours and Metastatic Epithelial Growths.

Having settled the morphological facts the next still more interesting point was to ascertain whether the injection of these blastomycetes into animals susceptible to malignant tumours would bring about the formation of neoplasms similar to the malignant tumours observed in man. Sanfelice approached the solution of this problem by passing the blastomyces with which he was experimenting through a number of dogs—that is, from dog to dog. By this method he arrived at positive results in two cases. In one of these the dog had been inoculated in the two posterior nipples with the blastomyces which had been passed through several dogs. After a slight inflammatory reaction at the site of inoculation the nipples remained apparently normal until about a month after the operation when signs of a neoplastic process became evident. The animal died 10 months later with marked cachexia, tumours in both teats, showing retraction of the nipples and tacking down of the skin, and secondary growths in the inguinal and abdominal lymphatic glands. All these showed the typical structure of adeno-carcinoma. Sanfelice's colleagues Biondi and Carboni confirmed this opinion. Numerous illustrations of the naked eye and microscopical appearances are appended to his communication. No parasites were observed in the centre of the primary tumours. A few were observed in the peripheral part of the primary tumour and in the metastases in the glands. He could obtain no cultures from any of these growths; the explanation he offers of this is that when the parasite has so grown accustomed to its surroundings as to take on the typical characteristics of Russell's bodies, and to become capable of producing malignant tumours, from that time it becomes incapable of growing in artificial media. (He evidently means by this the ordinary media on which he had grown his saccharomyces neoformans.) In order to be grown artificially the parasite must occur in the form in which it occurs in guinea-pigs, &c.—that is, in the form usually found in infections running a rapid course and seldom in those running a more prolonged course. If blastomycetes are isolated from malignant growths of man or animals he holds that they must have been present in the growth in both forms.

The foregoing positive result obtained by Sanfelice is so important that the other cases may also be given. A dog was inoculated in both testicles. After one and a half months swelling of the testicles and penis became evident and gradually progressed. The animal died after five months from accidental poisoning. The animal had been seen during life by various authorities, among them Dr. Marino Zuco of Rome who agreed that the growths were of a malignant nature. The examinations of the parts showed adeno-carcinoma of the testicles, with secondary growths in the neighbourhood of the penis and glans. The parasites were much more numerous than in the previous case, this being, he considers, due to the earlier stage at which the animal died. He explains that the longer the parasite is present in the tissues the fewer they become. They presented the typical features of Russell's bodies and as in the previous case no cultures could be obtained from the tumours. Further inoculation experiments are given, but these need not be quoted in detail. It is sufficient to state that a few positive results were obtained by inoculating dogs from the new growth in one of the cases referred to above.

Inoculation into the Circulation and Abdominal Cavity of Dogs and Cats.

Inoculation of dogs in the jugular vein led in the course of from one to one and a half months to connective tissue changes in which the parasite was present in small numbers and in its cultivable form. It was by intraperitoneal injection from dog to dog that he obtained the parasite which produced the epithelial growths already referred to. In the case of cats he found that the saccharomyces neoformans inoculated into the abdominal cavity or veins brought about the same changes as he had observed in the bodies of dogs inoculated in the same way. In the case of cats he confirmed his opinion that when the parasite had been long enough in the body to assume the typical forms of Russell's fuchsin bodies they were no longer cultivable in artificial media. If, however, the cats were killed soon after inoculation cultures could be obtained, the parasite then presenting the forms which occurred in guinea-pigs and rabbits where the infection ran a more acute course. One of the conclusions he draws from his experimental work with the saccharomyces neoformans is that it appears in the tissues of animals in two forms. In one form it possesses a capsule and is cultivable in artificial media. In the other it has no capsule, is identical with the fuchsin bodies of Russell, and cannot be cultivated in artificial media. This second form is only observed in the organism when the parasite has lived in it for some time.

Roncali's Histological Contribution.

Professor Roncali of Rome has taken a leading part in the appreciation of Sanfelice's work and has published important papers on the histological appearances in some malignant tumours in man. He was attracted by the fact that in a case of adeno-carcinoma of the ovary there were appearances identical with those described by Sanfelice and he came to the conclusion that they were due to the same cause, the presence of a parasitic blastomyces. He also noted the resemblance between the appearances in his case and those described in cancer and regarded by some authors as parasitic. He acknowledges with scientific justice and frank generosity that all authors had seen real parasites but that they had erred in assigning them a place in the animal kingdom. He thinks they were led by a false prejudice, wishing to see sporozoa. This circumstance had proved, he thinks, the inexhaustible source of all the errors made. He records three cases, two of adeno-carcinoma of the ovary and one of adeno-carcinoma of the colon with secondary involvement of the great omentum and mesentery. The detailed description of these cases it is unnecessary to

reproduce. In all he found the same appearances and he has no doubt as to their nature. He describes and figures the parasite both as extracellular and intracellular. From one of his cases he obtained cultures of blastomycetes. Inoculation of guinea-pigs with these cultures caused death of the animals and the production in many of the organs of little whitish nodules. These were of the nature of granulomata, only with more of the characters of new growth than of inflammatory products. The nodules showed many parasites, young and degenerated, and Roncali found them to be identical with a blastomyces isolated by him from an epithelioma of the tongue. Roncali undertook and records a large series of experiments to prove that the parasites had not reached the tissues from the air after removal from the body. He showed by these that dead tissue, whether of normal organs or of tumours, was not suitable for promoting the growth of blastomycetes and that blastomycetes show no preference for the tissue of malignant growths. Having disposed of the question of contamination he then discusses the question of the etiological factor in human neoplasms and his conclusion is that the genetic connexion between the blastomycetes and malignant tumours is proved.

Work of Other Observers.

Busse cultivated a blastomyces from a sarcoma, as has been already referred to. Kahane got pure cultures of a blastomyces from a cancer of the uterus. Mafucci and Sirleo have a paper on the blastomycetes as the cause of origin of malignant tumours, but their results are mainly negative while not denying the possibility of a connexion. An important case is recorded by Corselli and Frisco of sarcoma of the mesenteric glands, from which they were able to isolate blastomycetes which produced similar growths in guinea-pigs, rabbits, and dogs. They got pure cultures of blastomycetes in the patient's life-time and after death from fluid from the abdominal and thoracic cavities. Curtis had a case, referred to by Sanfelice and Roncali, of a myxomatous tumour in a man from which he obtained cultures of blastomycetes and by inoculation produced a tumour in a rabbit.

Conclusions.

To anyone going carefully through Sanfelice's work there is only one opinion possible and that is that it is a very careful and beautiful piece of investigation and research. To me it points in only one direction. The links in the chain of evidence are simple and strong and may be thus summarised. Investigating blastomycetes he finds appearances similar to those described as occurring in cancer both inside and outside the cells. Working on these lines he familiarises himself with the appearances presented by the parasite in the tissues and organs of different animals. He finds that in different animals the pathogenic effect varies from a somewhat rapid infection with great proliferation of the parasite down to a much less acute infection. In dogs, by inoculating them into the peritoneal cavity, he recovers the parasite from the lymph glands and passes them through another dog, and so on. Having in this way modified the parasite by the chemico-vital influences in the dog's body he inoculates the mammæ and the testicles of dogs with the modified organism and finds that it produces epithelial growths with metastases.

The success of others in cultivating blastomycetes from tumours, mainly malignant, adds confirmation to Sanfelice's results. Roncali is one of these, but his confirmation is largely from the histological standpoint and he was avowedly greatly aided in his observations by his acquaintance with the appearances in the tissues produced by inoculation with the saccharomyces neoformans as followed by Sanfelice. I have avoided reference to controversial questions, although Sanfelice and Roncali somewhat warmly criticise the work of those who considered the structures described as degenerations. Those interested in that negative aspect of the problem will find it fully referred to in various of the papers I have referred to. It seems almost needless to add that there remains abundant work to be done in this important and attractive field. One is pleased to see that a British worker whose name is already associated with work on the intracellular forms in cancer is obtaining positive experimental results. That blastomycetes occur in malignant growths appears to be established. That the sporozoa may be the cause of some malignant new growths is not necessarily quite put out of court, but their cultivation will, I take it, be a still more difficult matter. With the amount of positive work before us the evidence is incontestably in favour of the blastomycetes.

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Edinburgh.

SIX MONTHS' ABDOMINAL SURGERY IN WESTERN AUSTRALIA.

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IN the course of the past six months my partner, Dr. E. J. A. Haynes, has performed seven or (reckoning a lithotomy) eight abdominal operations. Seven of these eventuated in complete success, but in the eighth the patient revealed advanced malignant disease and the operation was therefore abandoned.

CASE 1.—This was a Littré's colotomy for malignant disease of the rectum. The mischief was too far advanced for excision of the bowel to be advisable. The chief point of interest in this operation was that, in accordance with the teachings of Mr. Reeves, a small abdominal incision was made, the colon was drawn out and stretched taut, and a glass rod four inches in length was passed through the mesentery and anchored to the skin of the abdomen by pieces of silk attached to pieces of strapping. No stitches were used to fix the bowel to the wound. The gut was opened on the fourth day and the rod was removed on the sixth day. The result was gratifying. There was a capital artificial anus in a good position and easily kept closed. Great ease and relief were given, enormous fæcal accumulations were got rid of, and a decided improvement in general health followed.

CASE 2.—This was a nephro-lithotomy for extensive pyelitis. The history disclosed a fall from a horse 10 years previously, resulting in extensive bruising and followed by the passage of much blood from the penis which was regarded at the time as coming from the left kidney. The patient recovered his health and the hæmorrhage ceased, but subsequently there were attacks of colic followed by the passage of gravel. This is interesting as confirming the view that traumatism is frequently the starting point of gravel. After some years of fairly good health he began to suffer considerably from lumbar pain and aching, to lose flesh, and, at a month before the operation, to pass pus. Tritipalm, terebinthinates, iron, blistering, and cupping were tried, but they all failed to reduce the amount of the pus, so it was decided to operate. The patient having been raised by a pillow to make the left flank tense Dr. Haynes made an incision which extended from the outer border of the erector spinæ, half an inch below the last rib for four inches downwards and forward towards the crest of the ileum. Passing through the lumbar fascia, between the transversalis and quadratus lumborum, the kidney was easily found. Palpation with the finger revealed no stone. An exploring needle mounted on a long holder had been prepared and on the second puncture a

calculus was detected. An incision was made into the kidney and the stone was quickly extracted. It weighed two and a half drachms. Hæmorrhage was free but it was easily controlled. Deep exploration revealed no other calculus, but one of the gentlemen who were assisting in the operation thought that the kidney must be too disorganised to be worth keeping. Dr. Haynes, however, decided otherwise. Iodoform was blown into the kidney wound, into which an indiarubber drainage-tube was then inserted which was left in for three days, pus and urine escaping by it on the first day but not afterwards. The man made a rapid recovery from the operation and left the hospital on the thirteenth day. For three weeks pus continued to pass in fairly large quantities in the urine but ultimately it ceased. In a month the patient resumed work completely cured—showing the wisdom of the decision to retain the kidney.

CASE 3.—This was a double oöphorectomy. The patient had been an invalid for years. She was unable to earn her living and suffered tortures at the menstrual periods. Both ovaries were found to have undergone cystic degeneration. One cyst contained, perhaps, half a pint of fluid and was apparently on the point of bursting. The patient made an uninterrupted recovery and left the hospital in three weeks. She is now in service entirely cured. She has menstruated once since the operation without pain or inconvenience.

CASE 4 was more interesting from a diagnostic aspect than from a surgical point of view. The patient was a man who had been living a hard life on the "Fields," to the hardships of which in the first instance he attributed his symptoms. He was extremely emaciated and slightly jaundiced, and he had a tumour over the liver and some slight ascites. The only possible alternatives were hydatids and malignant disease. To clear up the doubt some fluid was withdrawn and was submitted to a pathologist for microscopical examination. He reported that he thought that he had detected hooklets, but he was not sure. On this an operation was arranged, but on opening the abdomen it was at once apparent that we had to deal with advanced malignant disease and the abdomen was therefore forthwith closed. The patient rallied from the operation but he died on the next day. It was noticeable that the ascitic fluid was deeply stained with blood. As this was probably from the puncture it tends to show that exploratory needles can do harm at times.

CASE 5.—The patient had an enormous hydatid in the liver. Before coming under our care he had been treated at the public hospital for nine months for "congestion of the liver." An incision two and a half inches long was made over the most prominent part of the tumour, the incision passing through the fibres of the right rectus. There were no adhesions. The tumour was isolated by sponges and was then aspirated. About two gallons of fluid were contained in it. A small incision was made in the sac and the tumour was brought out by an assistant who grasped the lips of the cut with his index fingers. It was kept out by pressure forceps, the incision was extended, and ultimately the parent cyst was completely removed. The edges of the wounds in the sac and the abdomen were stitched together and an inch indiarubber drainage-tube was inserted. This was left in for a week. The wound was dressed daily with iodoform gauze. The patient made an uninterrupted recovery.

CASE 6 was also an operation for hydatid and from every point of view it was a most interesting case. At least five tumours could be made out by palpation. A large one was situated in the left iliac region and another large one could be felt in Douglas's pouch. Mr. White of Fremantle, Dr. Stewart of Guildford, and Dr. James of Perth saw the patient in consultation and agreed with Dr. Haynes that it was probably a case of multiple hydatids. A median incision of three inches was first made. This had subsequently to be enlarged upwards towards the umbilicus to five inches. The first two cysts dealt with were difficult to bring to the surface. They were therefore aspirated and brought out of the abdomen, interlocking stitches were inserted in the omentum, and then the sacs were removed. In the case of two others it was not feasible to do this, so after removing the mother cyst the investing sacs were sewn up and dropped back in the abdomen. Very great difficulty was experienced in isolating the tumours, so tangled were they with the mesentery and the omentum. The fifth cyst (the one in Douglas's pouch) proved the most awkward to handle of all. The mother cyst had an exceedingly fragile limiting membrane. After part of the fluid had been withdrawn the mother cyst slipped off the point of the needle back into the pelvis. The investing sac was solely peritoneal tissue and was so friable that it ruptured at a touch. The mother cyst also tore when it was being removed and about a pint of daughter cells—lovely globes of iridescent colour—escaped into the sac. These were carefully removed with an ordinary plated dessert-spoon. The greatest difficulty possible was experienced in suturing off the sac owing to its depth in the pelvis and the presence of a three-months' pregnant uterus. One of the cysts must have contained a gallon of fluid and another cyst nearly half a gallon. An additional point of interest in this remarkable case was that at the critical part of the operation the patient began to vomit violently and the heaving impulse forced the bowels through the abdominal wound. Fortunately there were several abdominal sponges in hot water in readiness and the protruding mass was quickly enveloped in warm sponges and the expulsion was controlled. As soon as the patient was once more deeply narcotised the bowels were easily returned and not the slightest subsequent ill effects were experienced. Had it not been for the abundant supply of suitable sponges this untoward accident might have had more serious results. The day was most oppressive, the temperature of the operating room being 103° F. Subsequently there was no vomiting or bad symptom of any kind, except that on the morning after the operation, while the nurse was fixing her bedclothes, the patient suddenly grew faint and exclaimed that she was dying. Dr. Haynes was rung up on the telephone, and an enema of brandy was ordered pending his arrival at the hospital. He found that the patient had recovered from her seizure, but that she had lost the use of the extensors of her right arm and that there was marked wrist-drop and loss of sensation which were doubtless due to embolism. Under massage and electricity she has since considerably recovered the use of her arm. Dr. Haynes has operated in upwards of 50 cases of hydatids—mostly in New South Wales, where they are much commoner than in this colony—and he has met with the same thing before. To our surprise the patient did not miscarry.

CASE 7 also was one of great interest. The patient had been under four different medical men who had diagnosed five different diseases—gall-stones, lead poisoning, floating kidney, intussusception, and ulceration of the bowels. When on his coming to me I offered a sixth opinion—appendicitis—he was naturally dismayed. There was a swelling in the right flank in the region of the cæcum which was resonant with vague dulness round. Severe spasms of pain began in the præcordial region and travelled backwards along the colon to the enlargement in the flank which swelled up visibly at these times. There was tenderness over McBurney's point. As Dr. Haynes concurred in my diagnosis, and Dr. Stewart, whom we called in, was equally positive, the patient accepted our dictum that an immediate operation was imperative. Fearing that there might be obstructive bands of adhesion to deal with the incision was made in the median line and not over the tumour. The omentum was found to be adherent to the parietal peritoneum and the small intestines were also adherent to the omentum, which rendered the early part of the operation full of pitfalls from the difficulty of distinguishing between parietal peritoneum and omentum. The large bowel was thickened and injected, the longitudinal band acting as a constriction to the dilated pouches of the colon. Great difficulty was experienced in bringing the cæcum into view, the omentum being positively ragged as well as adherent to the ileum. The appendix was swollen and enlarged and was slightly adherent to the peritoneum over the psoas, but it was easily separated. At one point it was almost ulcerated through. It was divided between sutures and the stump was sewn by a continuous over-stitch. So softened were the structures that it was difficult to make the stitches hold. It was then invaginated into the cæcum and the serous edges of the fold were united by mattress sutures. The severed appendix after being hardened in spirit was opened and examined. It was found to contain two grape seeds, three fishbones, a piece of eggshell, and a tin-tack. Rectal feeding had been necessary for two or three days prior to the operation and for three days after nothing was given by the mouth. Owing to the damaged state of the colon—and presumably also of the rectum—even peptonised beef-tea administered by the bowel caused hiccough and flatulence. The rectal tube was introduced every two hours and enabled the flatus to pass, but the hiccough was very annoying. The temperature was always normal and

the pulse never rose above 88. The wound healed by first intention. The catheter had to be used for the first four days and hypodermic injections of morphia were given to control restlessness and to procure sleep. The stitches, which included peritoneum, skin, and muscle, were removed on the ninth day and the patient was allowed up on the seventeenth day. There is every prospect of a complete recovery in this case.

I will only refer to the lateral lithotomy case by saying that 15 stones, ranging in size from that of a pea to that of a hazel nut, were removed and that some months subsequently to the operation it was found that a fresh stone had descended into the bladder. Dr. Haynes gradually dilated the urethra up to No. 18 English, which enabled the patient to pass the stone without further operation or subsequent ill effects.

These cases were alike in showing a gratifying absence of all symptoms indicating the slightest defect in the technique. All those patients who could have recovered did recover without rise of temperature, suppuration, or other alarming symptom. It is thus that the asepticism of the operator and his tools is best demonstrated. In private practice one cannot carry out all the minutiæ enjoined in the most recent works, but such a record shows that all which is really essential can be carried out even by the general practitioner. The principal authors whose recommendations we have followed have been Treves, Jacobson, and Kelly. The sponges are cleaned by the method so clearly described by Greig Smith—viz., with oxalic acid and hyposulphite of soda. The instruments are boiled for one hour in a solution of one drachm to a pint of carbonate of soda. At the time of the operation they are placed in a solution (one in 40) of carbolic acid and are subsequently transferred to trays containing cold boiled water. This water had been boiled for an hour and then placed in metal cans covered with a muslin cap. The abdominal sponges are squeezed out of a normal salt solution as recommended by Kelly and Robb, and are placed in a metal basin in boiled water apart from the rest. The ordinary sponges are received by a nurse as they become soiled and are squeezed out of a solution of one in 40 carbolic acid and are passed on to another basin of water which has been sterilised by boiling as above. The nurse has strict injunctions to keep the water hot in which the abdominal sponges are placed, so that they are always handed over warm. Any sponge or instrument which is brought accidentally in contact with any unsterilised object is at once put out of action. The hands of the operators and assistants are first scrubbed in hot water with plenty of soap. We have not yet arrived at the nicety of providing a separate nailbrush for each man, as is enjoined by Kelly, but care is taken to sterilise the nailbrushes as well as other things. The next wash is in a solution of the double iodide of mercury and potassium. A final wash in boiled water is followed by the wearing of rubber gloves up to the moment when the actual operation begins. As regards the toilette of the patient we do not in any way depart from the directions in the text-books. Chloroform is always used as the anæsthetic and subsequent vomiting has been conspicuous by its absence. This, Dr. Haynes considers, will always be the case when operators are careful to draw down the omentum before closing the abdomen. Two sponges are usually left in the abdomen—one in Douglas's pouch and one anteriorly until the last moment. When the stitches are in position and ready to be drawn tight these sponges are withdrawn. Thus all oozing is absorbed to the last moment and the peritoneal cavity is left dry. Another detail is worth mentioning—viz., that before the patient is removed to bed a pint of normal saline solution is injected into the bowel and this is repeated in six hours. This seems to prevent the thirst of which we so often hear. To prevent accumulation of flatus the rectal tube is introduced for two hours twice a day at first.

Perth, West Australia.

UNIVERSITY OF WALES.—The annual meeting of the Court of the University of Wales was held on April 21st, under the presidency of Dr. Isambard Owen, the senior deputy-chancellor. The court selected Dr. David Thomas of Ystalyfera, Swansea, and Mr. E. Davies, M.R.C.S. Eng., to represent the university at the forthcoming congress of the Sanitary Institute. Dr. Isambard Owen was unanimously reappointed deputy senior vice-chancellor and the Hon. G. Kenyon junior deputy-chancellor for the ensuing year.

ON A CASE OF CEREBRAL ABSCESS ILLUSTRATING CERTAIN FORMS OF APHASIA.

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THE following case appears to us to be worthy of being put on record as an illustration of one of the ways in which the cerebral speech mechanism may be interfered with by a collection of pus in the temporo-sphenoidal lobe. The abscess was secondary to middle ear suppuration and for a time ran the usual clinical course of such cases. It was evacuated and the patient's urgent symptoms disappeared. On the following day, however, it was observed that he showed symptoms of paraphasia and "word intoxication.' For the next two months he continued to exhibit peculiar forms of interference with speech, notably an inability to apply the correct names to objects, a tendency to employ the verbal instead of the nounal form in identifying objects, and frequent use of unintelligible language although there was no word-deafness.

The patient was a man, 22 years of age, and was occupied as a labourer. He was admitted to Leith Hospital on May 13th, 1896, complaining of pain and swelling in the region of the left ear. There was nothing in his family or personal history to throw any light on the condition from which he suffered. Three months before admission—in February, 1896—his left ear began to "run," but this did not trouble him much except for the accompanying deafness. Sometimes there was a good deal of discharge, then for a time there would be none. Four days before admission he caught a "severe cold" and on the next day the left ear became sore and painful with swelling all round it. The pain was so great for the next two days as to prevent sleep.

On admission this painful swelling was noted particularly in front of the ear and over the mastoid. Soon after admission relief was obtained by the escape of a large amount of discharge. There was no vomiting, giddiness, or loss of sight. Hearing was markedly diminished on the left side. On the 14th the left side of the head was slightly more prominent than the right. The swelling was greatest in front of the tragus but it was not now tender. There was no facial paralysis. On the 15th the patient had a bad night from pain on the left side of the head. The ears were examined; the left was found to contain much yellow fluid pus and the membrana tympani was obscured by granulations; the right ear contained wax. The patient heard the ticking of a watch on the left side only on contact and better on mastoid contact. It was heard by the right ear at a distance of 18 inches and on median contact was better heard by this ear. The disease therefore was probably still only in connexion with the middle ear and mastoid cells. On the 16th there was pain on both sides over the forehead, but no giddiness or staggering. The temperature reached 102·5° F. There was no rigor and very little discharge from the ear. On the 17th there was less pain and only on the left side of the forehead. On the 18th the pain and discharge were less and there was tenderness over the mastoid. On the 22nd an operation was performed. The mastoid antrum was opened and the middle ear was scraped out. The fluid injected by the mastoid opening passed out by the external auditory meatus, but not very freely. There was not much pus and but little smell. The patient had a good deal of pain in the afternoon. At 3.30 P.M. half a grain of morphia was administered subcutaneously. Improvement continued till the 28th, when the patient became quite insensible, very noisy and restless, and had to be tied down. At 10.30 P.M. on that date the patient was trephined over the posterior part of the temporo-sphenoidal lobe. With an aspirator needle pushed forwards and slightly downwards pus was at once struck and it escaped freely. The wound was further opened up, drained, and dressed with iodoform gauze. The pus was in the temporo-sphenoidal lobe as well

as in the meninges. This rapid abscess formation was the first evidence of intracranial mischief. Hitherto no aphasia had been noted.

On the 29th the patient, though dull and stupid, was quite conscious. He was irritable and anxious to get up. There were evidences of paraphasia and word-intoxication. He called a pipe a "knife" and matches "knife." There is a certain association of these objects with the idea of filling and lighting a pipe. It is interesting to note that there had been abscess formation in the temporal lobe without causing aphasia or any special localising symptoms. The only symptom noted was the great pain on the left side, particularly over the forehead, but that, along with the rise of temperature, occurred a fortnight before operation. On the 30th the patient was still restless and anxious to get up. Marked "paraphasia" was present. When asked what day it was he answered, "10 o'clock." He asked to be allowed to get up for "two weeks," meaning two hours. When shown a watch he called it a "clock," but he could not read the time correctly. He knew that his answers were incorrect and indicated by gestures his annoyance at this. In the evening he complained of pain at the back of the "right nose" and asked for the "night office," meaning the house surgeon. On the 31st he was still confused but looked better. He used wrong words for everything but wrote well to dictation and copied writing fairly well, therefore no word-deafness or visual aphasia existed. He understood what he was writing and copying; there was no paragraphia. During examination he became irritable and refused to stay in bed. On June 1st he determined to get up on to the "drawer," meaning the sofa. On the 3rd he was still anxious to get up, took food better, and had a good appetite. He could tell the time on a watch but could not name a key or a pair of scissors. On the 4th at about 4 A.M. he somewhat rapidly became dull and stupid and complained of great pain in the centre of the forehead and over the left eye; he kept groaning, did not know where he was, and could not understand what was said to him. He answered questions with great confusion of words so as to be quite unintelligible. At 3 P.M. he was still dull and drowsy. Q.—"Have you any pain?" A.—"Yes." Q.—"Where?" A.—"I'm all right." Q.—"Where is the pain?" His answer to this question was confused gibberish spoken very deliberately. On dressing the wound it was found that the pus was not draining freely. A probe passed inwards, downwards, and forwards gave exit to a quantity of thick, stinking pus, apparently extra-dural, over the roof of the tympanum. After the dressing the patient spoke freely but did not appreciate or use correct words. Q.—"What day is this?" A.—"6 o'clock." Q.—"What time do your friends come?" A.—"20 past six." Before these questions were put, he heard the resident surgeon ask the nurse if this was visiting night and when his friends came, therefore to some extent these answers were suggested. The condition of the patient had become worse on June 3rd, so that while, as formerly, he could not name a pair of scissors he could not now even express the abstract idea of cutting as being their use, and the report of the following day (June 4th) bears this out. With the paraphasia there was now for a short time some evidence of word-deafness, so that he talked gibberish and did not appreciate his mistakes, indicating an affection of the auditory ("word-hearing") centre, probably simply by pressure, as the exit of pus relieved the condition. This is not negatived by the correct answer "Yes" to the question as to pain, as this is one of the very common words for the appreciation of which the right hemisphere may be educated.

On the 5th at 11 A.M. the wound was dressed. Drainage was still imperfect. In the afternoon the patient complained of great pain. At 8.15 P.M. he was much worse; he presented a pale grey colour and was drowsy. The pulse was 60. The wound was explored with a director and a good deal of pus escaped both from the cerebral and the extra-dural collections. Slight left facial paralysis was observed. After dressing the pulse was irregular, varying from 60 to 72 per minute. Here there was evidence of general compression, looking to the relief obtained by the evacuation of pus, and affection of the facial nerve as it passed in relation to the middle ear. From 10.30 P.M. to midnight the patient was restless and noisy, calling out loudly, sometimes singing out his words. There was almost constant trembling of the whole of the left side, his right hand and arm were cold, and both his eyes were slightly open while he was asleep. At a quarter past twelve o'clock morphia was given hypodermically. On the 6th at 4 A.M. there was great pain which could not be localised. The patient talked incoherently. At 5.30 A.M. he was quieter again. The wound was dressed at midnight. The patient uttered no complaint of pain but said that he felt better. He was sensible. The pulse, which was irregular, was from 60 to 80. On the 7th, at 4 A.M., the patient was awake. Q.—"Are you better?" A.—"No." Q.—"Will you take some milk?" A.—"Give me some 'Diest,' the stuff I had before" (meaning beef juice). Slight tremor of the left hand, arm, and leg was observed. The pulse was 90 and regular. At 6 A.M. the patient, who was awake, looked bright and understood everything which was said to him. He spoke freely and sensibly, but could not give some things their proper names—e.g., wanting paper he asked for "bread." The pulse was 84 and regular. The patient had slept well all night and was not drowsy or stupid when awake. At 7 P.M. he could read words—e.g., "Edinburgh"—correctly. "Society" he pronounced *sokiety* and "Scottish" *skottidge*. Asked to name figures in a picture he seemed to understand what was wanted but gave absurd names to things, mixing up syllables so as to make words of no meaning. There was no word- or figure-blindness, but there was paraphasia in answering. On the 8th the improvement continued. He slept well, felt well, and spoke to the other patients. He read a little for his own amusement, said he felt "fine," and wanted to get up. When shown a pencil he called it a "kencil." A safety-pin he called a "nail-cut," a knife a "knife," a key a "knife," a bunch of keys "kniffs" (knives), and a watch a "handle." He could tell time on a watch correctly. There was no word-deafness, as shown by his ability to read for his own amusement. On the 9th there was still some paraphasia. On the 12th a hernia cerebri of the size of a small hazel-nut was noticed. On the 13th the patient complained of some pain in his eyes.

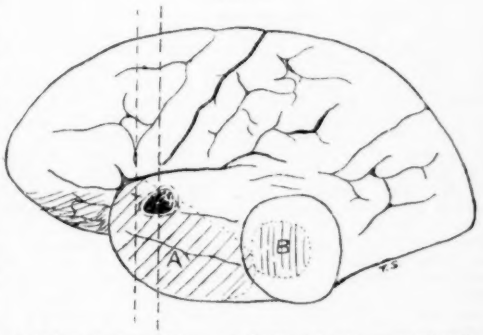
Notes of the case from this date onwards to June 25th give evidence of continued improvement. The patient still misnamed things, but in some instances after a time he would recall the proper name as if there were slow cerebration. He was able to get up and to walk about. On the 26th he played a game of dominoes. When asked to play he said that he did not know what it was, but when once he began he seemed to pick up the game very readily and he played correctly. This note is interesting, as indicating that the centres necessary for making the moves—visual—and the tracts connecting these with the motor, and the motor centres themselves were not involved in the disease, being placed higher than the parts destroyed by the abscess. It is also interesting that he read and understood the newspapers, as it indicates that not only the centres immediately concerned in this act but also the special word-hearing centre was not involved, as a patient cannot read with understanding when this centre is destroyed. On the 28th he went out and continued improvement was noted on the next day (June 29th). When shown a pencil he said "Always forget the name of that" and when asked what it was for he explained by signs and said that it was "for writing." A safety-pin was shown to him and he said, "I don't mind the name *yet*." He said it was for "catching anything," making a sign with his sleeve. He could not name a box of matches, but said it was for "lighting pipe." He could read the words "paraffin matches" on the box. When shown a match after reading the name on the box he could not name it, and when asked if it was a match he said, "I don't think so." The last note is curious as it would mean the existence of some word-deafness or auditory aphasia, but, as Dr. William Elder who saw the patient suggested, as he had paraphasia the answer "I don't think so" may not have been what he intended to say. Though he could read the words "paraffin matches" he evidently did not understand what they signified. The former answers indicate no word-deafness at all. It is quite possible that had he been shown the words "pencil" and "safety-pin" he would not have been able to connect them with the objects which they denote.

So far the case indicates clinically a lesion affecting the conducting fibres from the auditory centre to Broca's convolution. At times the history is difficult to understand, as some symptoms—the gibberish, &c.—seem to indicate word-deafness and shortly after others would indicate that this did not exist. From this date onwards the patient grew worse. On July 4th the hernia cerebri was much smaller, nearly flush with the surface, and the discharge was slight; elastic pressure was applied pretty firmly. In the evening he began to complain

of pain in the head and he vomited greenish-yellow fluid. He had a peculiar bluish or grey colour, similar to that which he used to have when the pressure was great in his head. He became dull and drowsy. The tongue was deflected slightly to the right. When shown various things he could not name them, but could tell what they were for in the verbal form—e.g. a bandage he said was "for putting round head" and keys were "for opening doors." The pulse was 56 and soft. All pressure was removed. There was no sign of pus about the hernia. In the afternoon the pupils were unequal for a time. There had been no vomiting since the bandage was removed. On the 5th at 11 A.M. the pulse was 84. The patient was less drowsy, he answered questions more readily, and gave evidence of amnesia of nouns but no word-blindness. He could read "Leith Monthly Visitor" fairly well, slowly but correctly. He was shown a picture of a railway carriage which he called "Eslanda." He called the flag in the guard's hand "thing to go round to go away," and the guard he called "man." He could not name a travelling trunk which was also in the picture. Some pus was found on dressing the wound. The hernia was larger. A drainage tube was introduced into the extra-dural space. The amnesia of nouns was seen particularly in connexion with the less familiar objects. He knew a safety pin, though he could not name it. He named a half-crown which is more familiar and often used; this may have been what Wyllie calls an "overflow" into the other hemisphere or partial education of it to common percepts. There was also "articulative ataxy"; he missed out parts of words—e.g., "wrying" for "writing." On the 6th the patient's condition was similar. He was less drowsy. On the 8th the tongue was still deflected to the right; otherwise there had been much improvement since the drainage-tube was inserted. On the 10th the patient was very drowsy. During the night there was pain across the forehead. On the 11th and 12th the discharge was freer but it smelt badly. On the 15th although the patient's general condition showed improvement he could not even repeat the names of objects which were mentioned to him. When shown a key and asked to say "key" he said "exstrat"; when a knife was shown to him and he was requested to say "knife" he said "a maggie"; and on showing him a chain and asking him to say "chain" he said "mobelle." Therefore here word-intoxication and paraphasia are more marked. On the 19th he was examined by Dr. William Elder. On attempting to read he could spell out the words and pronounce small words but could not read a simple sentence through so as to understand it. His memory for nouns was worse. He understood spoken speech quite well. He could not write his name but could write to dictation A, B, C, D, &c. He was more irritable. Dr. Elder notes: "This is probably due to spread of condition upwards. It is curious that no word-deafness was noted at this examination. Has the disease now spread towards the occipital lobe or angular gyrus?" On the 22nd the patient was not so well. He complained of a good deal of pain especially referred to the forehead. On the 23rd he had great pain and cried out a good deal. There were some spasmodic movements of the left leg. From the 24th to the 27th the patient's condition was getting worse. He was very drowsy and heavy. The pulse was slow, the temperature was subnormal, and he did not seem to understand when spoken to. The right grasp was absent and the left was very weak; the right knee-jerk was present and the left was absent. On the 28th at 9.30 A.M. there was Cheyne-Stokes respiration. The patient was unconscious. He swallowed with difficulty. There was no discharge. There were no localising symptoms. A pair of sinus forceps was passed forwards and somewhat upwards close to the bone and about half an ounce of thick, green, very foul pus escaped. A drainage-tube was inserted. Immediately afterwards the pulse increased to 84; the respirations were full and regular. The reflexes could be got more readily. At 5.30 P.M. the patient was conscious, though deeply asleep as a rule. He tried to speak but could only get out a jumble of words. On the 29th the patient was operated upon by trephining anteriorly to the hernia. The brain was very tense after the dura mater had been incised. No pus was got. At 10 P.M. the temperature was 105° and the pulse 142. The patient was quiet, sometimes moving a hand. On the 30th at 1.20 A.M. the pulse was thready and uncountable. The patient's breathing was laboured. During the day he gradually became worse and at 6.30 P.M. he died. From July 22nd onwards the signs had become more those of a general compression without localising symptoms. The second stage of the illness had shown an increase of the already existing paraphasia and amnesia of nouns, with some articulative ataxy, and finally death took place from compression.

A post-mortem examination was made on August 1st, 1896. The head only was examined. Behind the left ear was a hernia cerebri. (Fig. 1.) This had been developed

FIG. 1.



A, Extent of primary abscess. B, Pedicle of hernia cerebri, dotted line; outline of hernia indicated by the firm line.

in the upper part of a vertical wound over the mastoid process. The hernia measured two by one and a half inches. From this a recent operation wound extended forwards in the temporal region. No pus was noticed in the ears. On removing the calvarium the dura mater was found to be congested and the convolutions were seen to be flattened. On the left side the dura mater was adherent to the brain over part of the lower surface of the temporal lobe in relation to the petrous portion of the temporal bone.

FIG. 2.

Section from the position shown in Fig. 1, showing the extent of primary and secondary abscesses. 1, primary abscess. 2, Secondary abscess. Is., Island of Reil. c, Claustrum. L. N., Lenticular nucleus.

There was a depression in this bone over the situation of the superior semicircular canal, to which the dura mater was adherent firmly by a small process of fibrous tissue. The hernia was connected with the posterior third of the middle and part of the lower temporal convolution. A recent operation wound in the anterior part of the superior convolution was surrounded by extravasation into the brain substance which also extended to the adjacent parts of the ascending frontal and ascending parietal convolutions. There was laceration of the cortex in the inferior temporal convolution where the dura mater was adherent. In the posterior part of the inferior occipito-temporal and inferior temporal convolutions was a swelling at

the part where normally is a hollow to receive the upper surface of the cerebellum. This swelling was due to extravasation of blood into the brain substance. On horizontal section an abscess containing thick green pus was opened into in the position of the left lateral ventricle. The surface was congested, rough, and breaking down. The right lateral ventricle contained a small amount of non-purulent fluid. After hardening in formalin transverse coronal sections were made and tracings were taken. The left temporal lobe contained an old abscess cavity in its anterior two-thirds, tailing off into the second and third convolutions posteriorly. (Fig. 1.) Its contents were inspissated and white. The grey matter was thinned over it. The second (anterior) operation wound just stopped short of another recent abscess containing green pus. This was most extensive opposite the posterior part of the island of Reil. (Fig. 2.) On section it was found to be in the position of the external capsule and was invading both externally and internally, chiefly the latter, towards the lenticular nucleus. From this abscess a series of smaller abscesses extended backwards and downwards towards the base of the hernia, some reaching it. Internally and below, corresponding to the superficial swelling already noted, the lobe for about one inch in depth was infiltrated with blood. The hernia examined microscopically was found to be composed of breaking-down tissue infiltrated with pus, and into it by appropriate staining a few nerve fibres could be traced. The course of events had been: (1) middle ear disease extending into the antrum and affecting the facial nerve; (2) extension by the superior semicircular canal to the surface of the petrous bone and thence to the dura mater and cerebrum; (3) the formation of a primary abscess in the temporal lobe; (4) a hernia cerebri; and (5) secondary abscesses in the external capsule and extending thence chiefly into the lenticular nucleus and backwards towards the base of the hernia. These abscesses, with surrounding tumefaction and œdema both general and in relation to the basal ganglia, accounted for the later compression symptoms.

Thus we have the illness commencing with middle ear suppuration and probable direct extension to the temporal lobe in which the subsequent abscess formation affected the whole lobe with the exception of the word-hearing centre which was not affected at any stage. The abscess theoretically had interfered with fibres passing from below the word-hearing centre under the island of Reil to Broca's convolution, but was not at all in the line of those passing from the auditory centre proper to that motor speech area. The secondary abscesses were certainly in a situation which would interrupt these connecting fibres, but from the clinical aspects of the case we were disposed to connect them almost wholly with the more generalised symptoms of compression which went on to death and which latterly veiled other localising symptoms. Probably, therefore, these secondary abscesses may be left out of account in explaining the aphasic symptoms.

The fact that the symptoms of aphasia and paraphasia were observed only after evacuation of the first abscess may be explained by the insensibility which existed for some time before the operation and which masked a condition which only became evident when the causes of the coma were removed. After all, therefore, we may confine our consideration of the case to the primary abscess in the temporal lobe and see how the clinical aspects of the case are borne out by the pathological findings.

We have, then, an abscess involving the whole white matter of the temporal lobe with the exception of the auditory—word-hearing—centre. The aphasic symptoms noted were chiefly the paraphasia of which the patient was in most cases conscious and amnesia particularly of nouns and names, while even in this it was noticed that the patient was able to name at times certain common objects. In connexion with these articulative amnesia was noticed, parts of a word being given—e.g., "ence" for "pencil," "wrying" for "writing," and so on. With less familiar objects the patient was almost completely anmesic, though he could often denote by a sentence in the verbal form or assisted by gestures their use. The escape of the word-hearing centre explains his consciousness of the mistakes which he made, but the difficulty now is to explain his amnesia of nouns. The naming mechanism was at fault. The case seems to indicate that the area which controls this mechanism need not necessarily be identical with the auditory centre, but that there may be another part of the cortex in which memories of names are stored. No such centre has hitherto been described, though Elder in his book on Aphasia makes a suggestion which this case seems to support to a considerable extent. He says: "If, therefore, there is a naming mechanism separate from the auditory word-centre, then the clinical and pathological evidence point to an important part of that mechanism being situated in the near neighbourhood of the auditory word-centre, but probably lower down—viz., in the posterior half of the third and second temporo-sphenoidal convolutions" (p. 136). "Amnesia verbalis, and especially the form where there is amnesia of nouns, such as proper names and concrete nouns, may occur without there being any word-deafness or motor aphasia." "Lesion in the temporo-sphenoidal lobe, especially if towards the posterior part of the lobe, produces amnesia verbalis; if in the second and third temporo-sphenoidal convolutions amnesia verbalis occurs without word-deafness, but if the first temporo-sphenoidal is also involved the patient is word-deaf." "These facts tend to show that an important part of the mechanism concerned in the recalling of words and names is situated in the temporo-sphenoidal lobe towards the posterior part of the lobe and that this part of the mechanism is very closely associated and probably continuous with the word-hearing centre although not identical with it" (p. 139). "In connexion with auditory aphasia it is necessary to remember also that amnesia of nouns may be a marked symptom and in that case the naming mechanism is involved, an important part of which, as I have shown, is in all probability a little lower down than the auditory word-centre—viz., in the second and third temporo-sphenoidal convolutions. If the patient showed difficulty in recalling names or in naming objects at sight without having word-deafness the lesion would probably be found to be at a lower level in the temporal lobe than the first temporal, and if the patient showed a marked difficulty in naming objects at sight probably the lesion would be subcortical or deep in the substance of the posterior part of the temporal lobe" (p. 251).

Now, admitting the existence of such an area, the conducting fibres from it to Broca's convolution would be interrupted and the results would be such as were found in this case. Certainly all depends upon the elimination of the other factors present and we think that they may be eliminated on very reasonable grounds as already detailed.

Edinburgh.

THE INCUBATION PERIOD OF SCARLET FEVER, VARICELLA, PAROTITIS, AND RÖTHELN.

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UNDER the above title there has already appeared in THE LANCET[1] a paper by me giving an account of the periods of incubation from April 1871, to April, 1881, of some of the infectious illnesses incidental to boys. I now propose to add a further series of cases, thus giving altogether a continuous record from April, 1871, to April, 1899—a period of 28 years—being an analysis of bedside notes taken by myself. That out of the many hundreds of which I have notes I am able to furnish so few cases arises from the fact that amongst a large number of adolescents in intimate association with one another these ailments usually and rapidly become epidemic, and as soon as this occurs no reliable records can be obtained. Their value consists in the fact that the moment there is even a suspicion of infection the patient is placed in strict quarantine in the school sanatorium and there is therefore no further possibility of his continuing to infect others. This value is, however, somewhat diminished in this respect, that while one boy will declare himself ill on the occurrence of the slightest indisposition, another "thinks it is nothing" and will not surrender until compelled by his feeling ill or by the outward and visible signs manifest to his schoolfellows. Thus for some hours he may continue to infect others. There is therefore a small fallacy which must be allowed for, but the facts are as accurate as can be gathered from cases of patients in that period of life when such carelessness is a not unheard-of quality.

[1] THE LANCET, Oct. 29th, 1881, p. 743.

TABLE I.—*The Incubation of Scarlet Fever.*

No. of case.	Sex.	Age.	Sore-throat.	Rash.	Isolated.	Residence.	Possible source of infection.	No. of days incubating.
21	M.	16	Nov. 7, 1881	Nov. 8, 1881	Nov. 8, 1881	Mr. W.	?	—
22	,,	16	Nov. 14, 1881	Nov. 16, 1881	Nov. 16, 1881	,,	No. 21	6
23	,,	—	Feb. 1, 1885	Feb. 2, 1885	Feb. 1, 1885	Mr. M.	?	—
24	,,	—	Feb. 3, 1885	Feb. 4, 1885	Feb. 4, 1885	,,	No. 23	2

Remarks.—Case 22 was a great friend of Case 21. Case 24 slept next to Case 23 in the same dormitory.

TABLE II.—*The Incubation of Chicken-pox.*

No. of case.	Sex.	Date.	Residence.	Possible source of infection.	No. of days incubating.
24	Male	March 2, 1883	Mr. L. W.	?	—
25	,,	,, 3, ,,	,,	?	—
26	,,	,, 18, ,,	Mr. H.	Case 24	16
27	,,	,, 19, ,,	Mr. L. W.	Case 24 or Case 25	16 or 17
28	Female	Feb. 20, 1886	Mr. S.	—	—
29	,,	March 7, ,,	,,	Case 28	17
30	,,	,, 9, ,,	,,	,,	19
31	Male	,, 12, ,,	,,	?	—
32	,,	,, 31, ,,	,,	Case 31	19
33	,,	May 15, ,,	Mr. W.	?	—
34	,,	,, 23, ,,	Mr. S.	Case 33	13
35	,,	Feb. 27, 1889	,,	?	—
36	,,	March 14, ,,	,,	Case 35	15
37	,,	,, 31, ,,	Mr. M.	—	—
38	,,	April 18, ,,	Home	Case 37	18
39	,,	,, 18, ,,	Mr. M.	,,	18
40	,,	Nov. 29, ,,	,,	?	—
41	,,	Dec. 8, ,,	,,	Case 40	9
42	,,	Oct. 17, 1890	Mr. Mce.	?	—
43	,,	,, 19, ,,	Mr. C.	?	—
44	,,	,, 23, ,,	Mr. D.	?	—
45	,,	Nov. 1, ,,	Mr. P.	Case 43	13
46	,,	,, 2, ,,	Mr. Mce.	Case 42	16
47	,,	,, 5, ,,	Mr. M.	,,	19
48	,,	—	Mr. P.	Case 44	13
49	,,	Nov. 4, 1890	Mr. B. T.	?	—
50	,,	,, 19, ,,	,,	Case 49	15
51	,,	,, 18, ,,	Mr. Mce.	?	—
52	,,	Dec. 5, ,,	,,	Case 51	17
53	,,	May 18, 1894	,,	—	15
54	,,	June 2, ,,	,,	Case 53	15
55	,,	Nov. 5, 1895	Mr. B.	?	—
56	,,	,, 22, ,,	,,	Case 55	17
57	,,	Dec. 7, ,,	,,	Case 56	15
58	,,	June 28, 1896	Mr. S.	?	—
59	,,	July 14, ,,	,,	Case 58	16

Remarks.—Case 26 was in the same form as Case 24. Cases 28, 29, and 30 were three sisters—the eldest fell ill first and then the youngest. Case 32 was in the study of Case 31 on March 12th. Case 33 fell ill on the first day of term (May 15th). Case 34 was in the same form as Case 33 on May 15th before he was isolated. Case 36 was in the sick room on Feb. 27th visiting his brother before isolation. Case 37 visited home for a few hours on March 31st and was isolated later in the same day. Case 38 saw Case 37 on March 31st during this visit and fell ill at Hampstead. Case 39 was in the same house as Case 38. Fell ill in Brittany. Case 40 was covered with spots on Nov. 29th, 1889, which had been evidently present for a day or two before isolation and probably for several days more. A very questionable case. Case 45 was in the same form as Case 43. Case 46 was great friends with Case 42. Case 47 was in the same form as Case 42. Case 48 was in the same form as Case 44. Case 50 slept in the same dormitory as Case 49. Case 52 slept in the same dormitory as Case 51. Case 53 travelled to school from Eastbourne. As there was no illness at home the disease was probably caught in the railway carriage. Case 54 slept in the same dormitory as Case 53. Case 56 slept in the same dormitory as Case 55. Case 57 was a study companion of Case 56. Case 59 slept next to Case 58.

TABLE III.—*Chicken-pox and Measles Concurrent.*

No. of case.	Sex.	Age.	Residence.	Chicken-pox.	Measles.
1	Male	?	Home	Feb. 14, 1889	March 21, 1889

TABLE IV.—*The Incubation of Mumps.*

No. of case.	Sex.	Date.	Residence.	Possible source of infection.	No. of days incubating.	Side first affected.
58	Male	Nov. 17, 1884	Mr. S.	?	—	Left
59	,,	Dec. 2, ,,	,,	Case 58	15	Both
60	,,	,, 7, ,,	,,	,,	19	Right
61	,,	,, 7, ,,	,,	,,	19	,,
62	,,	,, 7, ,,	,,	,,	19	,,
63	,,	,, 7, ,,	,,	,,	19	Left
64	,,	,, 8, ,,	,,	,,	20	Right
65	,,	March 9, 1885	,,	?	—	,,
66	,,	,, 30, ,,	Mr. D.	Case 65	21	,,
67	,,	,, 31, ,,	Mr. Mce.	,,	22	Left
68	,,	Feb. 2, 1888	Mr. B. T.	?	—	Right
69	,,	,, 19, ,,	,,	Case 68	17	,,
70	,,	,, 19, ,,	,,	,,	17	,,
71	,,	,, 19, ,,	,,	,,	17	,,
72	,,	,, 22, ,,	,,	,,	20	,,
73	,,	,, 24, ,,	,,	?	—	—
74	,,	March 8, ,,	,,	Case 69	17	Right
75	,,	,, 8, ,,	Mr. P.	Case 73	13	,,
76	,,	,, 10, ,,	Mr. S.	,,	17	Left
77	,,	,, 13, ,,	Mr. B. T.	,,	20	,,
78	,,	,, 13, ,,	Mr. M.	,,	20	,,
79	,,	,, 14, ,,	Mr. P.	,,	21	Both
80	,,	,, 14, ,,	,,	,,	21	,,
81	,,	,, 14, ,,	Mr. M.	,,	21	,,
82	,,	,, 14, ,,	,,	,,	21	,,
83	,,	July 3, 1891	Mr. D.	?	—	—
84	,,	,, 22, ,,	,,	Case 83	19	—
85	,,	May 17, 1892	Mr. C.	Home	19	Right
86	,,	June 2, ,,	,,	Case 85	18	Left
87	,,	,, 20, ,,	Mr. S.	Case 86	18	,,
88	,,	,, 21, ,,	Mr. D.	,,	19	,,
89	,,	,, 30, 1896	Mr. C.	?	—	,,
90	,,	July 19, ,,	,,	Case 89	19	Both

Remarks.—Case 59 had orchitis on Dec. 9th, 1884. Case 60 slept next to Case 58 in dormitory. Case 61 worked in the same study as Case 58. Case 62 went into the sick-room where Case 58 was isolated on Nov. 18th, just before the latter was removed to the sanatorium. Case 63 was intimate with Case 58. Case 64 was visited constantly in his study by Case 58. Case 66 was in the same French set as Case 65. Case 67 sat immediately behind Case 65 in chapel. Case 69 was in the same form as Case 68 and sat next but one to him at meals. Case 70 slept in the same dormitory as Case 68. Case 72 sat at the same table at meals as Case 68. Case 74 slept in the next bed to Case 69. Cases 75 and 76 were in the same form as Case 73. Case 77 was working with Case 73 on the day before he was isolated (Feb. 23rd). Case 78 was in the same mathematical set as Case 73. Cases 79, 80, 81, and 82 were in the same form as Case 73. Case 83 went home from school to his father's funeral and on July 3rd slept with a brother who the next day showed symptoms of mumps. He was quarantined on returning to school (from July 16th) and on July 22nd showed mumps. Case 85.—The school assembled on April 29th. There had been mumps at home, and he was sent right away, but on his way to school went home to say good-bye. Case 86 sat next but one to Case 85 at dinner. Case 88 was in the same form as Case 86. Cases 89 and 90 were the only two cases which occurred in 1896.

I would again call attention to the orchitis of mumps and emphasise the facts that it is not a metastasis, that it almost invariably occurs on the seventh or the eighth day, and that it never arises (unless the mumps begin with it) if the patient be kept in bed over the eighth day.

RUBELLA OR ROSERASH.

In 1896 the committee appointed for the consideration of the Nomenclature of Diseases wisely removed the names of "rubeola" and "rötheln" and substituted that of

"rubella"; but inasmuch as all our infectious diseases have a vernacular name and are rarely called by their technical names, such as "variola" and "pertussis," but by their common names "small-pox" and "whooping cough," so in this disease they very unwisely left the common name, "German measles," standing. We have thus two totally distinct diseases, affording no protection against the other, denominated by the generic name "measles." For although one has the specific name "English measles," and the other "German measles," the distinguishing prefix is almost invariably omitted and both diseases go by the common name of "measles." This leads to endless confusion in schools where an endeavour is made to protect large numbers of scholars from these pests, and the oversight frequently occasions the needless isolation of children until it is ascertained beyond doubt which illness they are suffering from, which illness they have had, or which illness they have been exposed to. I receive numerous certificates stating that children have measles or that they have had measles or that they have been exposed to measles without any attempt being made to declare which disease is referred to. In the middle of last century this ailment—rubella—was known, but it was continually confounded with English measles and with scarlet fever. In the middle of the present century it was described in Germany and received the name of "rötheln," which we unfortunately translated into "German measles." In the early "fifties" an epidemic of it occurred at Rugby and was designated by the then medical officer to Rugby School "spring-rash"—a most appropriate name, for it never commences at Rugby earlier than in March and dies out in the middle of the summer. It was so rife in one year, about 1852, when quarantine regulations were in their infancy, that most of the boys were infected with it and worked and played as usual. Dr. Richard Bright, when visiting his son who was a pupil in the school, was asked to assign to it a more definite name and he declared it to be scarlet fever for which it was so commonly mistaken. For the last 30 years to my knowledge, during the tenure of office of my predecessor, Dr. Farquharson, M.P., and myself the disease has been invariably technically termed in Rugby School "epidemic roseola," but commonly "roserash," which is a most reasonable name in that it accurately describes shortly one of the main features of the disease—viz., the rash.

If these two diseases were not designated by synonyms their distinctions would soon be as clearly recognised as those of typhus fever and typhoid fever to the infinite gain of children at school, and they would cease, as is so frequently the case, to be regarded as two attacks of one and the same disease. It is to be earnestly hoped that when the committee issue the next edition of their Nosology they will distinguish between these two diseases by such distinctive common names that the public and the profession may readily lay hold of them and thus the present confusion would be avoided.

TABLE V.—*The Incubation of Roserash.*

No. of case.	Sex.	Date.	Residence.	Possible source of infection.	No. of days incubating.
37	Male	Feb. 28, 1882	Mr. J. B.	?	—
38	,,	March 16, ,,	,,	Case 37	16
39	,,	,, 17, ,,	,,	,,	18
40	,,	,, 28, ,,	,,	Case 38	12
41	,,	April 4, ,,	Mr. W.	Case 38 or Case 39	16 or 17
42	,,	May 11, ,,	Mr. H.	?	—
43	,,	,, 27, ,,	,,	Case 42	16
44	,,	,, 27, ,,	Mr. L. W.	,,	16
45	,,	,, 28, ,,	Mr. B. T.	,,	17
46	,,	,, 28, ,,	Mr. H.	,,	17
47	,,	June 12, ,,	Mr. L. W.	Case 44	16
48	,,	March 4, 1887	Mr. J. B.	?	—
49	,,	,, 19, ,,	,,	Case 48	15
50	,,	,, 21, ,,	,,	,,	17
51	,,	,, 3, 1893	Mr. D.	?	—
52	,,	,, 20, ,,	Mr. C.	Case 51	17
53	,,	April 3, ,,	,,	Case 52	14
54	,,	March 3, 1896	Mr. S.	?	—
55	,,	,, 17, ,,	,,	Case 54	14
56	,,	,, 5, ,,	Mr. M.	—	—
57	,,	,, 21, ,,	,,	Case 56	16

Remarks.—Case 38 was with Case 37 just before he was isolated. Case 39 was in the study of Case 37 with him on Feb. 27th. Case 40 was intimate with Case 38. Case 41 was in the same form as Cases 38 and 39. Case 43 was in the same dormitory as Case 42. Cases 44 and 45 were in the same form as Case 42. Case 46 was in the same study as Case 42. Case 47 was in the same study as Case 44. Cases 49 and 50 slept in the next bed to Case 48. Cases 52 and 53 were in the same form as Case 51. Case 55 slept next to Case 54. Case 57 shared a study with Case 56.

TABLE VI.—*The Incubation of Measles (18 Years Only—April, 1881, to April, 1899).*

No. of case.	Sex.	Residence.	Catarrh.	Rash.	Isolated.	Possible source of infection.	Number of days incubating.
1	M.	Mr. H.	24/6/82	28/6/82	28/6/82	?	—
2	,,	,,	3/7/82	4/7/82	6/7/82	Case 1	8
3	,,	Mr. S.	5/7/82	8/7/82	8/7/82	,,	11
4	,,	Mr. J. B.	7/7/82	9/7/82	9/7/82	,,	12
5	,,	Mr. L. W.	6/7/82	10/7/82	10/7/82	,,	13
6	,,	Mr. E.	18/5/84	21/5/84	21/5/84	?	—
7	,,	,,	27/5/84	29/5/84	29/5/84	Case 6	9
8	,,	Mr. B. T.	18/5/84	20/5/84	18/5/84	?	—
9	,,	,,	27/5/84	30/5/84	27/5/84	Case 8	9
10	,,	,,	28/5/84	30/5/84	28/5/84	,,	11
11	,,	Mr. S.	—	20/1/88	20/1/88	?	—
12	,,	Mr. B. T.	—	23/1/88	23/1/88	—	—
13	,,	Mr. S.	—	2/2/88	2/2/88	Case 11	15
14	,,	Mr. B. T.	—	3/2/88	3/2/88	Case 12	11
15	,,	Mr. M.	—	19/6/90	20/6/90	?	—
16	,,	Mr. B. T.	—	—	3/7/90	Case 15	13
17	,,	Mr. W. L.	—	—	4/7/90	,,	14
18	,,	Mr. P.	—	1/5/92	1/5/92	?	—
19	,,	,,	—	13/5/92	13/5/92	Case 18	12 or 13
20	,,	Mr. B.	22/5/92	25/5/92	22/5/92	Case 19	9
21	,,	Mr. S.	23/5/92	26/5/92	—	?	—
22	,,	,,	—	6/6/92	6/6/92	Case 21	10
23	,,	,,	—	17/6/92	17/6/92	Case 22	11
24	,,	Home	2/4/94	5/4/94	5/4/94	—	11
25	,,	,,	13/4/94	16/4/94	13/4/94	Case 24	11
26	,,	Mr. C.	15/5/94	19/5/94	15/5/94	—	12
27	,,	Mr. S.	9/5/95	12/5/95	12/5/95	—	—
28	,,	,,	20/5/95	26/5/95	21/5/95	Case 27	11-14
29	,,	,,	21/5/95	24/5/95	23/5/95		11
30	,,	,,	17/5/95	23/5/95	22/5/95	,,	8-11
31	,,	,,	22/5/95	26/5/95	23/5/95	,,	11
32	,,	Mr. W.	28/5/95	1/6/95	1/6/95	Case 28	12
33	,,	Mr. D.	8/6/95	11/6/95	11/6/95	Case 32	11

Remarks.—Case 2 was working with Case 1 in his study on the evening of June 26th. Cases 3 and 4 were in the same form as Case 1. Case 5 said to me: "I caught it from Case 1 who sits just in front of me in form." Case 7 slept in the next bed to Case 6. Case 9 shared a study with Case 8. Case 10 was working in the same study as Case 8 on May 17th. Case 11 returned to school on Jan. 19th at 7 P.M. and was isolated with rash at 2 P.M. on Jan. 20th. Case 12 returned to school on Jan. 19th and rash was full out on Jan. 23rd. Case 13 was in the same form as Case 11 on the morning of Jan. 20. Case 14 shared a study with Case 12. Cases 16 and 17 were in the same mathematical set as Case 15. Case 18 had rash full out on May 1st. School reassembled on April 29th. Case 19 was isolated on May 13th, when the rash was out. Case 20 was in the same form as Case 19. Case 22 sat next to Case 21 at dinner. The rash was full out on June 6th. Case 23 slept in the same dormitory as Case 22 and was in the same form. Case 24 saw a schoolfellow at Eton just before starting home on March 22nd and his schoolfellow sickened with measles on March 22nd. Case 25 arrived home from Radley on April 2nd; there had not been any measles there. Case 26 on May 3rd travelled to school with a friend who on arriving at Wolverhampton sickened with measles. Case 28 slept next to Case 27 from May 9th to May 12th. Case 29 sat next to Case 27 at meals and was in the same form. Case 30 slept next to Case 27 from May 9th to May 12th. Case 31 sat next to Case 27 at meals and was in the same form. Case 32 was in the same form as Case 28. Case 33 was in the same form as Case 32.

If now we analyse these records we obtain the following clinical facts:—

TABLE VII.—*An Analysis of the Periods of Incubation.*

Name of disease.	Shortest period of incubation.	Longest period of incubation.	The largest number occur on the following days.	The majority of the cases arise between the following days.	Percentage referring to previous column—e.g., 59 per cent. occur between 2nd and 4th days.
	Days.	Days.	Days.	Days.	
Scarlet fever	1	9	2nd and 4th	2nd and 4th	10 out of 17 = 59·00
Chicken-pox	13	19	15th	14th and 17th	24 out of 36 = 66·00
Mumps	14	25	19th	17th and 20th	50 out of 69 = 72·46
Roserash ...	12	22	16th	14th and 17th	31 out of 40 = 77·50
Measles	8	14	11th	9th and 12th	18 out of 24 = 75·00

I have thought that it might prove of interest to add a further record of the number of times an epidemic has been prevented by the instant isolation of the first and second cases and to show to some extent the infectiousness of the various diseases in the early stage. It is therefore clear that those infectious diseases which have been arrested the fewest number of times are the most infectious at the onset. It will be seen that roserash bears the palm.

TABLE VIII.—*Epidemics arrested by the Early Isolation of First Cases.*

Date.	Roserash. No. of cases.	Measles. No. of cases.	Mumps. No. of cases.	Scarlet fever. No. of cases.	Chicken-pox. No. of cases.
1871	—	—	—	—	—
1872	—	—	—	1	—
1873	—	—	—	—	—
1874	—	—	—	—	—
1875	—	1	—	—	1
1876	1	—	—	—	—
	1	—	—	—	—
1877	—	—	—	—	—
1878	—	—	1	—	1
	—	—	1	—	—
1879	—	—	—	—	—
1880	—	—	—	1	1
	—	—	—	1	—
1881	—	—	—	—	—
1882	—	—	—	—	—
1883	—	—	1	—	1
1884	—	—	—	1	—
1885	—	—	—	—	—
1886	—	—	—	1	—
1887	—	—	—	1	—
1888	—	—	—	—	—
1889	—	—	—	—	1
	—	—	—	—	1
1890	—	—	—	—	—
1891	—	—	1	—	—
1892	—	—	—	—	2
	—	—	—	—	1
1893	—	—	—	—	1
1894	—	1	—	2	2
	—	—	—	—	2
1895	—	—	—	1	—
	—	—	—	1	—
1896	—	—	2	—	—
1897	—	—	—	—	—
1898	—	1	—	—	—
1899	—	—	—	—	—
Number of epidemics prevented	2	3	5	9	11

Rugby.

A CASE OF TOXÆMIA WITH CONVULSIONS.

BY C. L. FRASER, F.R.C.P., F.R.C.S. EDIN.,
SURGEON TO THE BERWICK INFIRMARY.

A YOUNG man, aged 34 years, consulted me on Oct. 26th, 1898, regarding a peculiar numb sensation which he had experienced on the previous day in his left hand and arm and on the left side of the face and head. He was apparently strong and healthy, florid as he had always been from leading an active outdoor life, did not feel weak, and was free from headache, sickness, or any other symptom. The urine contained neither albumin nor sugar, nor any trace of acetone. The urea was also normal in quantity. The only other observable symptom was that the first sound of the heart was subdued and muffled. He had been working hard for some months both mentally and physically. The family history presented only the interesting fact of hereditary gout. The patient had no syphilitic history and he lived a very moderate life as regards alcohol. I ordered him to the south of England for complete rest and whilst there he had no symptoms of any kind to attract attention. He returned home on Dec. 4th. On the night of the 7th, after a fatiguing day, he was suddenly attacked on going to bed with violent general convulsions, preceded by the same numb sensations in the left leg and arm. Three seizures succeeded each other in rapid succession in the course of which the tongue was severely lacerated. I saw him immediately after the fits were over and stayed beside him for several days and nights. The convulsions were succeeded by violent vomiting which lasted intermittently for two days. The tongue was coated very thickly with a deep brown fur and the odour of the breath was so very unpleasant that it was at once observable to anyone entering the sickroom. He was dull and stupid for a day or two and had no recollection of anything which had happened. The urine now contained albumin, but this was probably due to the congestion caused by the violence of the fits. The reflexes of the left leg were exalted; sensation in both legs was equal; the pupils were equal on both sides and sensitive to light. There was no optic neuritis. The bowels had previously been constipated and owing to the vomiting no medicine could be given by the mouth, but what could be effected by enemas and glycerine injections was done successfully. At this stage he was seen by a well-known consultant who gave a very guarded opinion suggesting the probability of a cerebral tumour situated in the right fissure of Rolando. With such opinion I was loth to concur. On the night of the 14th the patient was threatened with another seizure; the twitching in the left leg and the numb feeling in the arm returned. He was in violent alarm, being quite conscious. A quarter of a grain of morphia was at once injected hypodermically, and 15 grains of chloral per rectum, which speedily allayed the symptoms. Another attack threatened on the 15th which was aborted in the same way. On the 16th a more pronounced attack came on; the left leg and arm twitched violently, the patient remaining conscious. During these events the tongue was dirty and the breath was as offensive as before; thirst was very great and the idea of eating was quite repugnant. On the 17th he took calomel and rhubarb, of each five grains, which acted very freely, bringing away large and exceedingly dark, foul-smelling stools. The patient expressed himself as feeling easier after that; the vomiting did not return, the thirst was less, and the edges of the tongue began to clear. There were no further local symptoms except that he could not well direct the left hand to pick up a small object. The bowels were kept very freely opened by pills given at night containing grey powder and compound pill of colocynth followed by draughts of hot mineral water in the morning. He still had 10 grains of chloral per rectum at night to ensure sleep which came on regularly. The fur was leaving the tongue and the offensive

odour was diminishing. The urine was normal and did not even deposit urates. As the tongue cleaned the appetite returned and in pleasing contrast to his former state of apathy the patient began to manifest interest in his surroundings and in private affairs. These symptoms progressed with such favour that his restoration to a comparative state of health was rapid. On Feb. 1st, 1899, the patient who had been out a good many times walking short distances, the left leg dragging a little on those occasions, drove a few miles over a rough country road to visit a neighbour and on his return had another convulsion, preceded by the numb feeling in the leg. It did not last long nor was he dazed or stupid after it; his memory was not at all impaired nor was there any loss of strength. The tongue was found to be dirty again, and the odour of the breath was objectionable, but not to the same extent as on the first occasion. Calomel brought away very dark offensive motions. He got up again in a day or two but was much afraid to go downstairs as he had lost confidence in his muscular power. He was taking hot mineral water every morning and four grains of calomel every seventh day. The patient came downstairs on the 12th and all went well until the 24th, when he had an interview with his father which included reference to business matters. He then had a conference with the factor, and finally with a friend. Being tired he went early to bed, when the same symptoms began in the leg, spreading up the left side and down the left arm and left side of the head. These became convulsed and finally all the muscles of the body were in violent motion, but it is to be noted that on this occasion he did not lose consciousness. The eyes were very anxious and staring, but not squinting. Suddenly, when the movements seemed most violent, they simultaneously ceased and he exclaimed "Thank God." At this attack the tongue was clean and the bowels were well cleared. The pulse kept strong and there was no tendency to vomiting. From the first feeling in the foot to the end of this attack the nurse judged to be about 10 minutes. He slept well afterwards and had no headache. After this he was put on 20 grains of bromide of ammonium thrice daily. On March 9th he was found to have kept very well and on this date he left home for an extended rest and change of scene.

In order to throw some probable light on the case let me cite in a few words the leading points of a previous illness. Five years ago the same patient consulted me, the prominent symptoms then being headache, constipation, furred tongue, and irritability of the skin, with patches of eczema. (As mentioned above he inherits a gouty diathesis.) This was preceded, as was the late illness, by occasional turns of ill temper. During the subsequent course of medicine the symptoms cleared and all went well until a patch of skin on the chin suddenly became inflamed. This was succeeded by others on the chin and neck, which threw out crop after crop of pustules, which lasted for a fortnight, on the subsidence of which he speedily recovered. A course of water at Nauheim benefited him greatly.

In closely examining such cases one is struck by the similarity of the course of events to that occurring in uræmia, epilepsy, and cerebral tumour. In regard to the first-named it is to be noted that the kidneys were perfectly healthy and secreting a normal quantity of normal urine. With diseased kidneys one is of course not surprised to encounter any of the numerous phenomena usually met with in so-called uræmia, but it must be observed that the same class of symptoms may be met with while we are dealing with perfectly sound kidneys. Whatever part urea may play in the production of the clinical symptoms it is hard to explain how it can produce such a wide and varied train of events. I do not purpose to discuss the mechanical and chemical theories at present before us but simply to quote my case in support of the latter. That the exciting cause of the two illnesses of my patient was a toxin or toxins absorbed from the liver or intestines I do not doubt. I am of opinion that in the one instance the skin was selected as the channel of elimination, and in the other a similar poison produced an irritant discharging effect on the motor cortical cells in the region of the right fissure of Rolando. What these poisons are is not known, although several theories exist. In this relation the following remarks by Dr. Saundby assist one to some extent. He says, "We are not in a position at present to explain precisely the pathogenesis of so-called uræmia. It is plain that the clinical phenomena vary and that there are many poisons to which these symptoms may be due." "If we are to get a nearer knowledge of these problems it must be by differentiating the clinical types and by recognising the probability that different agencies may be at work in each." Dr. Bradford in writing on Uræmia in Allbutt's "System of Medicine," says: "Modern knowledge, however, certainly shows that a poison circulating in the general blood-stream may pick out but one portion of the nervous system or even produce a lesion on one side of the body only." There was no optic neuritis to support the idea of a tumour being the cause of the symptoms. On March 10th I saw the patient with Sir William Gowers. After an exhaustive examination he also was of opinion that there was no tumour, that probably the nerve-cells were weakened by the first illness, and that the toxin circulating in such impure blood determined the convulsive seizures in the later illness.

Berwick-upon-Tweed.

THREE CASES OF JUVENILE GENERAL PARALYSIS.

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THE following cases of juvenile general paralysis have all ended fatally at the Newcastle-on-Tyne City Asylum within eight months.

CASE 1.—A young man, aged 22 years, single, was admitted into the asylum in February, 1898. He had always been strictly temperate and had been considered to be a sharp, clever boy, but was never strong. Five years before his admission he was an eye-witness of his father's accidental death and he was very considerably affected by the shock. The first definite mental symptoms were noticed three years before his admission, when he became stupid, dull, and lazy. Two years later he became shaky and tremulous. His sister and his father's uncle were insane. No history of syphilis could be obtained. On admission he was found to be considerably demented and he could only with difficulty comprehend the simplest question and his memory was almost a blank. Physically he was well formed and nourished. His speech was slow, hesitating, and slurred, with much twitching of the lower facial muscles. His tongue was protruded with difficulty and was very tremulous. The pupils were unequal, irregular, eccentric, and they reacted sluggishly consensually and to direct light. His gait was feeble and unsteady. Mentally he varied much from day to day. At times he was childish, happy, and emotional, and he would talk in an exalted manner of his new clothes and his high wages. On other occasions he was dull, heavy, and unresponsive. The dementia gradually became more profound. He always remained stout and took his food well. The knee-jerks became greatly exaggerated and all the paretic symptoms intensified. On Sept. 27th he had a paralytic seizure, from which he quickly recovered. On Oct. 3rd he had three right-sided convulsive seizures. After the third seizure continuous twitching commenced on the left side of the face and in the left limbs, continuing all night in spite of treatment, and on the following morning extending to the other side. During the next three days he had many severe general convulsions and in the intervals twitchings of the right side of the face, the right arm, and the leg. He died on Oct 8th at 9.10 P.M. A post-mortem examination was made on Oct. 10th at 11 A.M. The body was found to be well nourished. The skull cap was thick, hard, and dense. The dura mater was considerably thickened, stiff, and opaque, without abnormal adhesions either to the calvarium or the lepto-meninges. The basal vessels were healthy. The pia arachnoid was thickened, spongy, and milky, with dilated vessels and excess of fluid in its meshes. Adhesions were universal over both hemispheres with the exception of the occipital poles. The choroid plexuses were cystic. Seen from the surface the convolutions were wasted, especially in the pre-frontal regions. The cortex was extremely atrophied and soft and the lateral ventricles were dilated. The ependyma both of the lateral and fourth ventricles was coarsely granular. The heart was small and flabby with no valvular abnormalities and the myocardium was of normal colour and not unduly friable. There was extensive broncho-pneumonia of the basal lobe of the right lung. The kidneys showed atrophy and fatty changes in the cortex. The encephalon

weighed 1205 grammes, the right hemisphere 460 grammes, the left hemisphere 443 grammes, the cerebellum 143 grammes, and the pons and bulb 20 grammes. The cerebro-spinal fluid measured about 12 ounces.

CASE 2.—A male, aged 19 years, single, was admitted into the asylum in July, 1897. His history was as follows. He was a clerk until two years before his admission and was a sharp, healthy lad. Then he began to lose his memory, his arms became shaky and his speech affected. Three months before admission he had some convulsions and became excited and restless. No history of syphilis, alcohol, or neuropathic heredity could be obtained. On admission he was found to be excitable and restless and wet and dirty in his habits and generally very demented. He was in fair bodily condition. His speech was accompanied by a well-marked "facial flicker" and there was a mitral murmur. On July 17th, 1898, the pupils were equal and contracted. The direct light and consensual reactions were absent on both sides. The tongue showed both coarse and fine tremors and the speech was profoundly affected in an entirely typical manner. He was feeble on his legs, without any characteristic peculiarity of gait. The left knee-jerk was absent and the right was diminished. There were large intention tremors of both arms. He gradually became more demented and often required catheterisation and feeding with the œsophageal tube. By October, 1898, he had become so feeble that he was permanently confined to his bed and was quite unable to speak beyond an unintelligible monosyllable. He was often noisy and restless and would lie for hours with his head just raised from the pillow and being continually wet and dirty in spite of careful nursing he developed small bed-sores. Towards the end he became rapidly emaciated. He died on March 15th, 1899, at 2 40 P.M. A post-mortem examination was made on March 16th at 11 A.M. The body was found to be emaciated. The skull cap was of normal thickness and density, the dura mater was thickened, without unusual adhesions, and the vessels at the base were healthy. The pia arachnoid was thick and spongy and it showed diffused milky opacity. There were general firm pial adhesions and almost the whole of the cortex was torn up and eroded on stripping the membranes. The only regions comparatively free were the occipital lobes and the right central convolutions. The frontal lobes were small and were pointed in shape and the convolutions generally showed much wasting. The cortex was atrophied and congested posteriorly. The lateral ventricles were dilated, with smooth ependyma. The ependyma of the fourth ventricle was finely granular. The heart was small and the mitral orifice admitted merely the tip of the little finger. The myocardium was pale but of normal consistence. Both lungs showed deposits of recent tubercle at the apices of the lobes and were œdematous at their bases. The kidneys showed thickening and adherence of the capsules and atrophy and toughness of the cortex, and were both generally pale. The encephalon weighed 1170 grammes, the right hemisphere 440 grammes, the left hemisphere 410 grammes, the cerebellum 130 grammes, and the pons and bulb 10 grammes.

CASE 3.—A female, aged 23 years, a married woman, was admitted into the asylum in June, 1898. The patient had been married for five years and was said to have contracted syphilis after her marriage. She had had several miscarriages. Two years before her admission she had had a convulsive seizure, her memory began to fail, and she used to do silly things. She became progressively worse and 18 months later had another convulsion, followed soon after by two more, the last occurring a fortnight before her admission and lasting for an hour and a half. The catamenia were latterly regular. On admission she was silent and restless and she had practically no memory; she had no idea of time or place and she could scarcely understand the simplest question. She was in fair bodily condition. Her speech was drawling, indistinct, and slurred, with much tremor of the lips, especially the upper lip. The pupils were equal and moderately contracted, the reflexes (direct light and consensual) were almost absent, but the pupils reacted well during accommodation. Her gait was feeble and the patellar reflexes were brisk. The plantar and epigastric reflexes were absent. There were no signs of disease in the thoracic or abdominal organs. Mentally she was sometimes noisy, excited, and incoherent, this being frequently the case at night. At other times she was silent, dull, and confused, and took no notice of her surroundings. On July 18th she had a convulsive seizure. On August 7th she had two seizures during the night and twitched on the left side of the face and in the left limbs all the following day. After this there was great difficulty in swallowing and the temperature was raised. On Oct. 9th she began to have slight nightly rises of temperature and on the following day there was dulness at the base of the right lung with coarse crepitations. She died on Oct. 13th at 8.30 P.M. At the post-mortem examination which was made on Oct. 14th at 3 P.M. the body was found to be emaciated. The calvarium was thick and dense. The dura mater was thickened generally and adherent to the skull cap. The vessels at the base were slightly atheromatous. The pia mater was thickened in all regions except over the tips of the occipital lobes and was very œdematous. Adhesions were general on both sides. The convolutions showed marked atrophy, the cortex was thin, and the white substance exhibited sclerosed and prominent vessels. The lateral ventricles were dilated and showed coarse granularity of their lining membranes. The ependyma of the fourth ventricle was also granular. The myocardium was not markedly degenerated. There was extensive broncho-pneumonia at the base of the right lung. The liver was large, congested, pale, and fatty. The right kidney showed two small abscesses in the cortex and some flakes of lymph in the pelvis; the capsule was very adherent. The left capsule was also adherent, the cortex was irregular, and the whole organ was pale. The encephalon weighed 1200 grammes and after dissection 1052 grammes; the cerebellum, the pons, and the medulla weighed 150 grammes.

Remarks.—Although general paralysis occurring at the periods of puberty and adolescence is now a well-recognised condition I venture to think it must be comparatively rare to have three such cases under observation at one time in the same institution. The following points of interest suggest themselves. As to the age of the patients, in Case 1 definite mental symptoms were first noticed by the friends at the age of 19 years, in Case 2 at the age of 17 years, and in Case 3 at the age of 21 years. These ages are somewhat higher than the average (about 14 years) of the cases reported by Dr. Clouston, Dr. J. Wiglesworth, Dr. A. R. Turnbull, Dr. Charcot, and others. In duration the cases lasted respectively four, four, and nearly two and a half years. These figures are of course only approximate and they should probably be higher as it is impossible to state accurately when the first symptoms occurred. Thus Case 1 and Case 2 lasted longer than the average duration of the adult form. According to Dr. Wiglesworth this is usually the case in young paralytics. As regards sex, if anything, more female cases appear to have been recorded than male, but Dr. Mickle thinks that the sexes are about equally affected. This is in strong contrast to the sex incidence in the disease as it occurs in adults. Dr. Wiglesworth remarks that in females menstruation is almost invariably absent. Case 3 was an exception to this rule. All of the cases showed early, profound, and rapid dementia, and in only one (Case 1) was optimism noticed. From the records I have seen this latter condition is distinctly rare in these cases. As to motor symptoms and reflexes, there were tremors in the muscles of the face, feeble and tottering gait, and pupillary anomalies and convulsive seizures in all of the cases. In both of the male cases violent "intention" tremors of the upper limbs were a prominent feature in the later stages. An interesting feature in the pathological appearances was the exceedingly well-marked nature of the post-mortem changes. All of the classical signs were present and were more pronounced than in ordinary adult cases. I might particularly mention the widespread and firm pial adhesions. Dr. Callcott informs me that this is entirely in accord with his experience of these cases. As to the causation of general paralysis occurring in young subjects a larger proportion of cases seems to be associated with a history of syphilis than is the case amongst middle-aged patients. In not one of these three cases was any characteristic sign of syphilis discovered at the necropsy, but a somewhat doubtful history of infection was obtained in one. Although not strictly to the point I cannot help remarking that physicians in many asylums, who are accustomed to investigate the causation in large numbers of general paralytics year after year, must find it impossible to accept the opinions of those authorities who connect the disease closely with syphilis and describe the latter as being the leading, if not the only, essential factor in its causation. From personal knowledge of three asylums in the North where large numbers of general paralytics are annually

admitted I can state that histories of syphilis and definite clinical or post-mortem signs of that disease are extremely rare. Hereditary tendency was present in one case. In Case 2 no cause could be assigned.

I am indebted to Dr. Callcott, the medical superintendent of the asylum, for permission to publish these cases.

Newcastle-on-Tyne.

WOUNDS CAUSED BY SOME PROJECTILES AND THEIR TREATMENT.

BY EDWARD E. CRASTER, L.R.C.P. & S. EDIN., L.F.P.S. GLASG.,

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I HAVE in my possession a large number of projectiles of many kinds, varying from the "iron-pot" slug to the 0·303 rifle bullet. I propose very briefly to describe a few interesting cases of slug and bullet wounds which have come under my notice during four years' residence in West Africa.

In these regions nearly every variety of warfare is experienced. This is largely due to the changes in the character of the country as the traveller passes from the sea up the river Niger into the far interior. In the lower river thick bush and forest prevail for some 200 miles, then follows open country covered with stunted trees, while further inland are observed open sandy plains with ranges of hills and huge masses of volcanic rock. It can be readily understood from this that the native mode of warfare varies with the character of the country. In the delta regions one has to contend with ambuscades at close quarters (from 10 to 20 yards); higher up the country stockaded forts and rifle-pits have to be dealt with; and in the open country one is assailed by masses of cavalry assisted by sharpshooters. A large proportion of my experience having been in bush-fighting my returns show a reversal of the usual conditions of European warfare, wounds of the head, of the neck, and of the upper extremities forming a large percentage of the total casualties. Surgeon-General Longmore's statistics of wounds are well exemplified by the results of the Niger-Soudan campaign in which I took part, as the total casualty return gives a large proportion of wounds of the abdomen and lower extremities. This campaign was carried out entirely in the open country where we were opposed to large masses of cavalry assisted by "snipers" and the range varied from 200 yards to 1000 yards.

CASE 1. *Slug wound of the abdomen.*—The slug penetrated the abdomen at an inch to the left side of the umbilicus. When I saw the patient part of the omentum was protruding and the man had walked a quarter of a mile holding it up with his hands. The protruding tissue was thoroughly washed in a solution of perchloride of mercury and after enlarging the opening I returned the omentum into the abdominal cavity. There was no bleeding and after careful exploration I could find no internal injury. There was no exit wound, but the slug—a piece of iron hammered into the shape of a bullet—was found under the skin covering the right gluteus muscle. Thus the slug had travelled downwards and to the right without inflicting any vital injury. There were no complications and the man made a good recovery.

CASE 2. *Slug wound of the neck.*—When I first saw this patient blood was spurting out from the side of his neck in a most alarming fashion. I at once seized the place with my finger and thumb and so stopped the bleeding, at the same time calling out for my orderly who carried an emergency bag. Almost simultaneously two soldiers dropped badly wounded quite close to me. Not having time to find the injured artery I applied a compress of blue wool which had been steeped in the compound tincture of benzoin and put the man into a hammock. On seeing this man in the hospital the same evening, as there was no sign of hæmorrhage, I did not disturb the dressing; in fact, I thought that the best treatment was that of non-interference, and not until the third day was the dressing removed. I found that the wound had quite closed up, that there had been no discharge, and that there was no inflammation whatever. Within a week the man was discharged from the hospital and he returned to his duty as a carrier. I think that this case is a good example of the advantage of the hermetical sealing of wounds. True, the wound was not large—it was about one-eighth of an inch in diameter—but it was complicated by a ruptured artery, possibly the sterno-mastoid branch of the superior thyroid. It is now three months since the man was wounded and I have seen him several times. He suffers no inconvenience, although he still carries the slug somewhere in his neck.

CASE 3. *Bullet wounds (Snider) of the arm, the penis, and the thigh.*—This man was shot while taking aim himself. One bullet came down vertically, his assailant being in a tree and the other came from the bush on his right. The first bullet, travelling vertically, made a deep furrow on the outer side of the left arm from the shoulder to the elbow. The other, after passing through the dorsum of the penis, penetrated the inner side of the left thigh and lodged under the skin on the outer side of the thigh four inches below the great trochanter. The interest attaching to these wounds lies in the facts that the urethra was intact, that the femoral artery was missed by a hair's breadth, and that the femur was not touched. The patient made an uninterrupted recovery and was discharged from the hospital in two months.

CASE 4. *Bullet wound (0·303) of the thigh.*—This man was an Ilorin. He had annoyed us greatly by "sniping" from behind a tree. One of our officers silenced him with the Lee-Metford. When the fighting was over for the day and we were in camp the man was brought to me. On examination I found that he had been shot through the thigh, the bullet entering in front and coming out behind. Both the entrance wound and the exit wound were small and clean and I could only discriminate them by the fact that the lips of the exit wound were slightly bulged out. After being shot the man had received two severe sword-cuts at the back of the neck. The cuts were stitched, the bullet wound was dressed and the man was placed in the temporary hospital. Next morning, as we could not carry him on, he was sent to a village in the rear. During that morning we made the final advance upon Ilorin, carrying on a desultory fight the whole way. In the afternoon when in front of the town to my surprise my patient of the day before turned up to have his wounds dressed. He had walked the whole of the 10 miles in spite of his severe injuries. This forms an excellent example of the small amount of damage which is done by the 0·303 bullet when it is brought into contact with "soft parts," and by far the largest percentage of bullet wounds are in these parts.

I had two other cases of 0·303 bullet wounds, one in the left shoulder and one in the jaw. The case of the wound in the jaw was interesting. The bullet had passed upwards beneath the lower maxillary bone and had penetrated the soft parts between the inner surface of the bone and the tongue. It had taken a semicircular piece out of the tip of the tongue and had made its exit at the mouth, taking two of the lower incisors with it. The man said that there had been a good deal of hæmorrhage, but there was none when I saw him. He came every morning for his wound to be dressed and when we left the town he was on a fair way to recovery. I think that the cases which I have cited may fairly be considered to be out of the common and I trust that they will prove to be of some slight interest to the profession, and especially to those whose lot has not called them to endure the *sturm und drang* of the "back of beyond."

My method of dressing wounds is always the simplest possible. For first aid on the field the orderlies carry a satchel containing bandages, sal alembroth wool, Leslie's plaster, and bottles containing brandy and potassium permanganate tabloids, the latter mostly for the treatment of wounds from poisoned arrows. The after-treatment of course depends largely upon the character of the wound, but I always use as my basis the sal alembroth gauze. I consider it to be *par excellence* the best dressing for bullet wounds.

In conclusion, I should like to say a word on the subject of finding the bullet. Let me warn young surgeons against showing too much zeal in this direction. I have seen much harm done by injudicious probing and cutting for the bullet. One should never lose sight of the fact that there are four immediate effects caused by a bullet travelling at high velocity coming in contact with the body—shock, solution of continuity of the surface, laceration of internal parts, and burning of the parts during the passing of the bullet. Imagine the condition of the unfortunate individual when to all this is added probing, enlarging of openings, and digging with various bullet forceps. There is plenty of time for all these operations afterwards, and if the surgeon will turn all his attention to the cleansing and dressing of the wound and the making of his patient comfortable I can predict a large measure of success and a high percentage of

recoveries from even very serious wounds. Again, do not be in a hurry to amputate. A good surgeon should not only know when to use the knife but also when not to use it. Conservative surgery is the order of the day, but the Services have been slow in following that principle. I will quote two cases which well illustrate this. The first was that of an European officer who was severely wounded in the upper third of the thigh, with fracture of the femur, the bullet lodging in the gluteal region. After consultation with a surgeon in the navy who was kindly lending me his assistance at the time I decided not to amputate and the officer at the present moment has two legs instead of one. The second case was that of a native soldier who received a bullet wound of the arm. The humerus was fractured in two places and there was extensive laceration of the flesh. In this case also I thought it better not to amputate. The man is still a member of the Royal Niger Constabulary and is a useful soldier with two arms. I could quote many other cases which have come under my notice but the above will suffice. I think it will be enough to repeat my warning: take time, do not be in a hurry, and all will be well.

SUPPURATING CYSTS OF BOTH OVARIES REMOVED BY ABDOMINAL SECTION FIVE WEEKS AFTER AN ABORTION, FOLLOWED BY SEPTIC ABSORPTION; RECOVERY.

BY ERNEST A. T. STEELE, M.R.C.S. ENG., L.R.C.P. LOND.

A WOMAN, aged 33 years, who was seven weeks pregnant, after over-exerting herself had a slight hæmorrhage on Dec. 30th, 1898. The next day the ovum came away apparently whole and without further loss. On Jan. 1st, 1899, during the afternoon the patient felt chilly and had a headache and her temperature rose to 102° F.; the lochia were a little more profuse than normal but not offensive. An intra-uterine douche of 1 per cent. lysol solution was given in the evening. On the 2nd the morning temperature was 101° and the pulse was 96. The patient complained severely of headache and temporo-facial neuralgia. In the evening as the temperature had risen to 103° the uterus was curetted and many fragments of decidua were removed, after which an intra-uterine douche was given. On the 3rd the morning temperature was 102·4° and the pulse was 108. She had much headache. In the afternoon the cervix was dilated under anæsthesia and the interior of the uterus was thoroughly explored. A further quantity of decidual débris was removed from the fundus and anterior wall. The uterine wall was then swabbed thoroughly with pure carbolic acid. During the examination it was noticed that there were small cystic tumours in the situation of both ovaries. The evening temperature was 101° and the pulse was 108. On the 4th the morning temperature was 101·4° and the pulse was 108. She had much headache and some nervous excitement. There had been no tenderness, but on this day there was considerable gurgling in the right iliac fossa, probably due to the fluid diet. However, as there was a possibility of the patient having enteric fever, a specimen of the blood was examined for Widal's reaction with negative results. The evening temperature was 100·2° and the patient was more comfortable. On the 5th the morning temperature was 101°. The headache was better. The patient was sick in the night. There was tenderness on deep pressure in the right inguinal region. On the 6th the morning temperature was 101° and the pulse was 96. There was tenderness on the left side and the patient was much troubled with flatulence which was relieved by a simple enema. A vaginal examination revealed tenderness and deposit in the left fornix. On the 8th the morning temperature was 103·6° and the pulse was 120. The patient was very restless and thirsty; the lower half of the abdomen was distended and painful, a specially tender spot being over the right ovary; there was also some irritability of the bladder. These symptoms were considerably relieved by hot turpentine fomentations and by the evening the temperature had fallen to 100·6° and the abdominal distension had disappeared. From this time onward the patient's condition fluctuated from day to day; she had very little pain and her general condition remained good and it was hoped that the inflammatory condition would subside. However, by Jan. 26th a mass had developed in the right broad ligament depressing the fornix and continuous with an obscurely fluctuating swelling above Poupart's ligament on that side. On Feb. 2nd the temperature rose to 101·2° and she had another attack of pain and abdominal distension, and during this attack the pulse became weak and irregular for the first time. As the patient's condition was evidently getting worse and there was much fear that a rupture of one of the tumours might take place it was decided to operate without further delay. Accordingly after due preparation of the patient, &c., I operated on Feb. 5th, assisted by Dr. Randall and Dr. Forsyth, the anæsthetic being administered by Mr. Peatson. To these gentlemen my best thanks are due for their help. The anæsthetic chosen was $A^1C^2E^2$ mixture given in Silk's inhaler.

An abdominal incision three inches in length, afterwards enlarged to three and a half inches, revealed a confused and matted condition of the pelvic structures which at first sight appeared inextricable. The omentum completely roofed in the pelvis, being firmly adherent to the lower part of the abdominal wall and to the structures which it covered. Beginning on the right side the adhesions were separated and the thickened and inflamed omentum was tied off in sections and cut away. There was then exposed a universally adherent tumour in the situation of the right ovary. A loop of intestine was firmly attached to this tumour and in separating this attachment a small abscess cavity, bounded on the one hand by intestine and on the other by the tumour, was ruptured. The pus was at once swabbed up and the enucleation of the tumour was completed. The pedicle of the tumour was transfixed and tied with No. 2 silk and the tumour was removed. It proved to be a dermoid cyst of about three inches in diameter the contents of which were bathed in pus. A search was then made for the Fallopian tube on this side but it could not be traced, being buried in the dense inflammatory adhesions. The tumour on the left side was then dealt with. It was adherent everywhere and on separating its anterior attachments it ruptured and gave exit to a quantity of purulent fluid. The rent was clamped and the rest of the cyst was separated until a pedicle was formed; a ligature was then applied as on the opposite side. The left Fallopian tube was found and also removed. A further search was now made for the right tube but without success. The cyst of the left ovary was two inches in diameter. The pelvis was washed out with boiled saline solution and carefully dried, the iliac fossæ being also mopped out. Owing to the free escape of pus from the tumours and general slight oozing from the torn adhesions it was judged wise to drain. The abdominal wound was closed in three layers except where the drainage tube passed and the usual dressings were applied. The operation lasted one and a half hours from the beginning of the anæsthetic till the patient was put to bed.

The after progress of the case was satisfactory. There was very little sickness or pain. A little distension of the abdomen on the second and third days was relieved by the rectum tube. The discharge was rather free but remained serous throughout, not becoming purulent at any time. A bacteriological cultivation of it gave numerous colonies of streptococci in chains of 10 or 12 elements and staphylococci. The drainage-tube was left out finally on Feb. 12th, seven days after the operation. The catheter was only required for 24 hours. The bowels acted with a simple enema five days after, on Feb. 10th. The patient was allowed up on a couch on Feb. 20th and went out in a bath chair on March 2nd, the wound being soundly healed. At the time of writing (April 16th) she is in good health and able to perform her usual duties.

This case strongly illustrates the dangers to which small ovarian cysts may give rise should they become infected and suppurate after parturition or miscarriage. If these tumours had been discovered before the patient became pregnant and miscarried, in all probability their removal would have been a very simple proceeding instead of the difficult and dangerous undertaking it proved to be when they were matted and bound down by inflammatory adhesions. I think that the sequence of events was as follows: septic absorption from the uterus and cellulitis of the left broad ligament; infection of the left cyst and an attack of peritonitis on Feb. 8th; adhesion of the loop of the bowel to

the dermoid cyst of the right ovary; and, lastly, infection of the dermoid cyst from the abscess which formed between it and the bowel.

Southend-on-Sea.

A NOTE ON THE OCCURRENCE OF EPITHELIAL PEARLS IN THE TONSIL.

BY HUGH WALSHAM, M.A., M.D. CANTAB., M.R.C.P. LOND.,

ASSISTANT PHYSICIAN (FORMERLY PATHOLOGIST) TO THE CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST; CLINICAL ASSISTANT TO THE HOSPITAL FOR SICK CHILDREN, GREAT ORMOND-STREET.

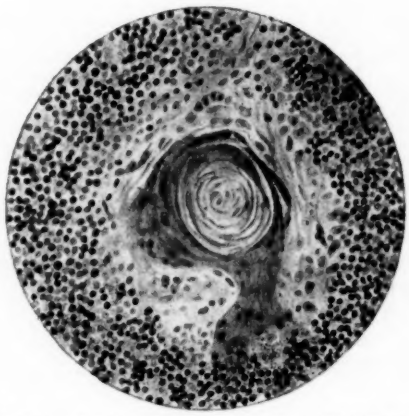
THE late Professor Kanthack[1] in an interesting paper called attention to the occurrence of epithelial pearls in the tonsils of human fœtuses and new-born infants and pointed out that they occurred as retentions and not as embryonic inclusions. Professor Kanthack in a later paper, published in the *Journal of Anatomy and Physiology*, vol. xxvi., brought forward weighty arguments against the pearls which are found in the mid-line of the palate and in the other places being due to inclusion products, as described by Mr. Bland Sutton in his lectures on Evolution in Pathology. The occurrence of these epithelial pearls in the tonsils of adults is not altogether rare, and while making some observations on the occurrence of tubercle in the tonsil I met with three very good specimens in the tonsils of men aged 27, 31, and 35 years respectively. The occurrence of these pearls in the organ is of interest because I think there can be no doubt that they are the origin of at least some of the so-called tonsil calculi. The accompanying illustrations show very clearly these interesting bodies. In Fig. 1, from the male aged 27 years, three of

FIG. 1.

Vertical section through the tonsil showing three of the pearls.

these pearls are seen, the middle one showing evidence of calcification. The centre of these pearls shows no definite structure, it is only on carefully examining the periphery that we see that they are composed of horny, squamous, epithelial cells pressed tightly together. They bear a very close resemblance to the epithelial cell nests found in some of the epitheliomata. Fig. 2 shows another of these curious bodies, which is probably not so old as the former specimens as the epithelial cells can be traced nearly to the middle of the pearl. These pearls are clearly retention products and cannot possibly be due to epithelial inclusion as no fusion of epithelial surfaces takes place in the tonsil. Their occurrence, as before said, is not altogether rare, but these are the only three examples met with out of 150 post-mortem examinations of tonsils made with reference to this point. Professor Kanthack once informed me that since 1889 he had fairly often observed epithelial pearls in the tonsils at all ages. But in addition to these retention pearls we find epithelial accumulations in the adenoid tissue of the tonsil which, as far as I am able to ascertain, have not before been described. They are mostly to be found in the centre of one of the closed lymphatic follicles and have no connexion with the epithelium lining the tonsillar crypts. According to Professor Retterer[2] both the ectoderm and mesoderm take part in the

FIG. 2.



Vertical section through the tonsil showing epithelial pearl in adenoid tissue.

formation of the tissue composing the closed follicles of the tonsil. He says the tonsil is formed by epithelial involutions and swelling of the mesoblastic tissue, then by the formation and detachment of terminal epithelial buds. The closed lymphatic follicles are formed by the formation round these buds of lymphoid tissue. As life advances this central epithelial accumulation disappears. I have specimens of tonsils from young persons showing these epithelial accumulations in the centre of the follicles. I think, therefore, they cannot be regarded as either retention or inclusion products, but that they are produced by the normal evolution of the organ.

Harley-street, W.

[1] Kanthack: Illustrated Medical News, Nov. 9th, 1889.

[2] Retterer: Origine et Évolution des Amygdales chez les Mammifères. Journal de l'Anatomie et de la Physiologie, 1888.

CARMARTHENSHIRE COUNTY COUNCIL.—A meeting of the General Purposes Committee of the Carmarthenshire County Council was held on April 19th under the presidency of Sir James Hills-Johnes. A special committee was selected to consider the suggested appointment of a medical officer of health for the county. They were further requested to report upon a proposition which recommended that each district council of the county should be advised to adopt the Infectious Diseases Notification Act.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—A quarterly court of this society was held on April 12th, Mr. Christopher Heath, Vice-President, being in the chair. Three new members were elected and the deaths of two were reported. The deaths of two widows were announced; one had been in receipt of grants since January, 1870, and had received £1847 18*s.*, and the other since July, 1874, and had received £1429 10*s.* A first application was read from a widow for herself and two children and a grant was made. It was resolved to distribute £1201 10*s.* at the next court to the 48 widows, 12 orphans, and five recipients from the Copeland Funds, now on the funds. Sir Thomas Smith, Bart., was nominated for election as Vice-President at the annual general meeting, and the following gentlemen as directors, Mr. Morley, Mr. King, Mr. Leigh, Mr. Gimson, Dr. Samuel West, and Dr. Whipham. It was decided to hold the annual general meeting on May 31st, at 5 P.M. The expenses for the quarter were £56 10*s.*

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

NOTE ON THE TREATMENT OF THROMBOSED VARICOSE VEINS BY EXCISION.

BY F. A. SOUTHAM, M.B. OXON., F.R.C.S. ENG.,
SURGEON TO THE MANCHESTER ROYAL INFIRMARY; LECTURER ON OPERATIVE SURGERY, OWENS COLLEGE.

IN an interesting address on the Operative Treatment of Varicose Veins published in THE LANCET of April 8th, 1899, Mr. Pearce Gould describes two cases where excision of large thrombi and immediate closure of the wound was attended by very satisfactory results. Mr. W. H. Bennett has also advocated and carried out a similar line of treatment.[1] Having recently adopted this course with success in a patient who was the subject of very extensive thrombosis of the internal saphena vein in the thigh a brief record of the case may perhaps be of interest.

The patient, a male, aged 44 years, had been troubled since he was 18 years of age with slight varicosity of the veins of the right leg below the knee. Three years ago the internal saphena vein became involved in the right thigh and on two occasions he had suffered from attacks of thrombosis, limited to this portion of the vessel, necessitating confinement to bed for some time. On admission into the hospital on Oct. 20th, 1898, he was suffering from a third attack which had commenced 11 days previously. The vein from the knee upwards was extremely dilated and filled with firm clot, being plainly perceptible beneath the skin as a prominent cord. It was very painful and tender upon pressure, the skin over it being reddened and œdematous. The patient's temperature was 101·6° F. He was kept at rest in bed, glycerine and belladonna were applied, and the limb was wrapped in cotton-wool. Under this treatment the inflammatory symptoms subsided, but there was no indication of any tendency to absorption of the thrombus, the vessel remaining cord-like and distended with clot. Accordingly, at the end of a month, as the patient was becoming impatient at the prolonged confinement to bed, it was resolved to excise the thrombosed portion of the vein. On Nov. 10th a linear incision 12 inches in length was made over the course of the saphena vein in the thigh and ligatures were placed round the vessel above and below the varix, which commenced very abruptly about two inches below the saphenous opening and terminated just above the level of the knee-joint. The thrombosed portion of the vessel which was somewhat tortuous with marked pouching of its walls was then removed between the ligatures. The part excised, which was filled throughout with softish clot and measured 15 inches in length, in the greater part of its course was of about the thickness of an adult thumb. The wound was closed, no drainage being employed. It was dressed for the first time on the ninth day, when it was found to be soundly healed. The patient left the hospital on Dec. 12th and shortly afterwards resumed his occupation as a market porter, which he has since followed.

The satisfactory result of the operation in the present instance would certainly induce me to perform it again under similar conditions, for not only was the patient's convalescence hastened—the absorption or the organisation of an extensive thrombus always being a tedious process—but he is freed from any further attacks of thrombosis with the risk of embolism, a complication which is liable to occur when the main trunk of the saphenous vein is involved in the upper part of the thigh.

Manchester.

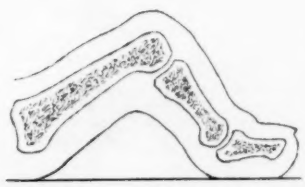
HALLUX VALGUS AND HAMMER TOE.

BY T. S. ELLIS, M.R.C.S. ENG., L.S.A.,
CONSULTING SURGEON TO THE GLOUCESTER INFIRMARY.

DR. W. J. COLLINS, in THE LANCET of April 15th, having spoken of these deformities as being "closely allied,' goes on to state that in a case which he reports "so strong was the valgus impulse that the coincident deformity of a hammer second toe afforded no obstacle." I ask permission to remark that when conditions are "closely allied" it is hardly probable that the existence of one would be an "obstacle" to the co-existence of the other and, also, to show that the common occurrence of both together can be fully explained.

All idea of a "valgus tendency" as an "exclusive prerogative of the hallux" or otherwise must be discarded. Given free play to the natural functions of the great toe, it will maintain a capacity to come when in action into a line with the inner margin of the foot. And this faculty may be reacquired by exercise of function alone in those who have in very marked form the incipient hallux valgus which is, as a consequence of wearing median-pointed boots, well-nigh universal. When the great toe is at rest it is inclined upwards and outwards over the end of the second toe. It is shown thus in the frontispiece to my book[1] as the Position of Rest. On the other hand, the smaller toes when at rest are, or should be, straight. When in action as toes, they serve as pressing, and not, like the fingers, as grasping organs: they are drawn into the position shown in Fig. 1. This is essentially

FIG. 1.



Position of phalanges when the toe is in action.

the same as that given in illustrations of typical hammer toe. It will be seen that the final phalanx rests flat on the ground forming on its upper surface a level bed. Now if the great toe be fixed by the median-pointed sock and boot when it is in the position of rest, then so soon as the second toe is brought into action the great toe falls on to the level bed thus formed and the arrangement shown in Fig. 2 completed. Obviously, the second toe

FIG. 2.

Position of hallux if pressed over second digit.

FIG. 3.

Position of hallux if pressed under second digit.

has, when so placed, a difficulty in resuming the straight position, adaptive shortening of the ligaments ensues, and permanent hammer toe results. So, too, the great toe, never being allowed to attain its natural position in walking, becomes fixed in an exaggerated degree of its inclination when at rest. This is the common course of events. If, however, the great toe happen to be packed under the second, as shown in Fig. 3, there is usually a much greater interference with function and a greater degree of irritation in the metatarso-phalangeal joint. I discussed these points in a paper read before the Royal Medical and Chirurgical Society in February, 1897,[2] from which the illustrations are taken.

I may add that a month is full soon for Dr. Collins to feel sure as to the result of his operation. If the patient does not give plenty of room for the toes in his boot pressure on

[1] THE LANCET, Oct. 15th, 1898, and April 8th, 1899.

[1] The Human Foot.

[2] Transactions of the Royal Medical and Chirurgical Society, vol. lxxx

the cicatrix may result in a keloid condition giving cause for regret that amputation of the toe was not preferred.

Gloucester.

"REPLACEMENT OF A SEVERED PORTION OF THE NOSE."

WE published on March 11th an interesting clinical note by Dr. W. M. Abbot-Anderson bearing this title. Briefly the case was as follows. A man while in the act of sharpening a knife cut off a portion of his nose. The piece

was found and sewn on again by Dr. Abbot-Anderson with precautions which he described in detail in our columns and which the accompanying illustration reproduced from a photograph of the patient shows to have been crowned with success.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ROYAL FREE HOSPITAL.

A CASE OF ACUTE TETANUS TREATED BY SERUM; DEATH; NECROPSY.

(Under the care of Mr. JAMES BERRY.)

IN THE LANCET of April 22nd was recorded a case of tetanus in which recovery followed the employment of tetanus antitoxin and we pointed out then that the cases in which the anti-tetanic serum appeared to be of most value were those in which a long incubation period had occurred between the infliction of the wound and the appearance of the symptoms. In the case recorded below six days elapsed between the injury and the first signs of the disease. This is decidedly a short incubation stage and it would of itself suggest the probability of a very severe attack, for the shorter the period of incubation the more acute are the symptoms. The very rapid progress of this case is remarkable. Cases lasting a much shorter time have, indeed, been described but many of them are more than doubtful. The often-quoted case related by Robinson of a negro butler who died from tetanus a quarter of an hour after cutting his hand with a broken plate need not at the present time be seriously considered. With regard to the anti-tetanic serum treatment in the case recorded below 35 cubic centimetres in all were administered with no sign of improvement and, on the other hand, with no manifestation of any symptoms of poisoning from the antitoxin. In the present uncertain state of our knowledge of this still novel method of treatment all cases in which it is employed, especially those ending fatally, should be put on record. For the notes of the case we are indebted to Mr. T. Percy Legg, F.R.C.S., senior resident medical officer.

A man, aged 27 years, was admitted into the Royal Free Hospital on Jan. 18th, 1899, and gave the following history. On the 12th he was climbing over some railings and ran one of the spikes through his boot into the ball of the great toe of the right foot. He took no notice of the accident as it gave him no trouble and he remained well till the 18th, on which day he went to work as usual but about 1.30 P.M. had pain in the back and neck. Soon afterwards he was unable to open his mouth for more than a quarter of an inch and could not swallow. At 6 P.M. he attended at the hospital and was admitted. There was well-marked tonic spasm of the masseters. The back was somewhat arched and the muscles were rigid and prominent. The head was drawn backwards; there was slight twitching at the angles of the mouth and the corrugatores supercilii were in action. The abdominal muscles were hard and rigid. The temperature was normal and the pulse was 120 per minute. The patient was quite unable to swallow liquids. On the right thumb there were two clean recent cuts and on the ball of the right big toe there was a suppurating wound half an inch long. This was opened and about a drachm of pus was let out; the wound was scraped well and swabbed with one in 20 carbolic lotion. At 10 P.M. on the day of admission 10 cubic centimetres of antitoxin (Jenner Institute) were injected into the muscles of the back and 40 grains of potassium bromide with 20 grains of chloral were given by the rectum. At 4 A.M. on the 19th he had a well-marked clonic spasm with opisthotonos; risus sardonicus was well marked. He was cyanosed and sweated freely. Another 10 cubic centimetres of antitoxin were given as well as the same amount of chloral and bromide as before. At noon the symptoms were more pronounced; the abdominal muscles were very hard and retracted and there was marked retraction of the head, the chin being thrown high upwards. There was constant twitching at the angles of the mouth, together with well-marked risus; the masseters were very hard. Another 10 cubic centimetres of antitoxin were given. The wound in the foot was excised freely. One-fifth of a grain of morphia was given hypodermically. At 2 P.M. he had been sleeping on and off since the morphia was injected, but awoke every few minutes with a clonic spasm which became rapidly more violent and tonic in character. The temperature was normal and the pulse was 144. Another five cubic centimetres of antitoxin were given at 3 P.M. About 4 P.M. the patient had a violent tonic spasm; the back was arched backwards completely, so that he rested almost entirely on his head and heels. He died in this attack, the muscles at once becoming relaxed, the jaw dropping, and the abdomen becoming flaccid. No urine was passed while he was in the hospital.

Necropsy.—On a post-mortem examination being made it was found that rigor mortis was not marked. The vessels of the brain were congested, the arachnoid was thickened and opaque, and the brain substance was firm. The spinal cord above the lumbar enlargement was very soft and in the arachnoid there were numerous white hard (? calcareous) spots, varying in size from that of a pin's head to that of a split pea; they were most marked in the cervical region and over the corda equina. Except that the lungs, liver, spleen, and kidneys were all much congested there was nothing else to note in the examination.

Remarks by Mr. BERRY.—The chief points of interest are the very rapid course of the disease and the uselessness of the treatment by antitoxin in such very acute cases. On admission the patient had already well-marked opisthotonos and although the serum treatment was begun within 10 hours of the onset of the first symptoms of the disease it did not apparently exert the slightest influence in mitigating the

severity of the spasms or in arresting the progress of the disease. From beginning to end the symptoms lasted only 27 hours.

BARBADOES GENERAL HOSPITAL.

A CASE OF REMOVAL OF 14 URIC ACID CALCULI FROM THE BLADDER BY THE AID OF AN EXTEMPORE RECTAL BAG.

(Under the care of Dr. T. SINCLAIR BROWNE.)

SURGEONS are always liable to be called upon to operate when unprovided with many of the appliances which are usually considered necessary and they are very ingenious in devising efficient substitutes, but we do not remember ever to have read of a more ingenious device than that recorded below by Mr. F. Deane. Petersen's bag is not essential in many cases of suprapubic cystotomy, but there are certainly cases when no safe degree of distension of the bladder suffices to raise the bladder so that it may be opened from above; in such instances the value of a rectal bag is often very great. For the notes of the case we are indebted to Mr. Frederick Deane, junior resident surgeon.

A coloured man, aged 52 years, was admitted into Ward 3 of the Barbadoes General Hospital on Jan. 19th, 1899, with symptoms which were characteristic of vesical calculus. He was instructed to retain his urine on the night previously to examination and the bladder was sounded for calculus, and what was thought to be one very large calculus was detected lying behind the middle lobe of the prostate. The patient having consented to an operation he was prepared in the usual manner. On the 26th Dr. Sinclair Browne performed suprapubic cystotomy with the result that 14 uric acid calculi were removed from the bladder. The largest of the calculi when dried weighed 106 grains and the smallest 40 grains. The patient made an uninterrupted recovery.

Remarks by Mr. DEANE.—As vesical calculus is of exceedingly rare occurrence in Barbadoes our hospital does not possess a rectal bag, and although I was aware that the rectal bag has at times been dispensed with by some surgeons, still I thought it advisable to have some such contrivance in readiness, so I obtained a piece of an old inner tube of a bicycle tyre nine inches long and sealed up one end with ordinary rubber cement, attaching to the other end a small piece of rubber tubing four inches long with an ordinary douche stop-cock attached to it, placing a piece of glass tube inside this rubber tubing so as to give it rigidity to receive the strapping for uniting the two. In this way was formed a sausage-shaped rectal bag, which acted splendidly, for the bladder on being distended with 12 ounces of warm boric lotion did not rise sufficiently above the superior border of the pubes to enable the operator to get freely at the portion of the bladder which is uncovered by the peritoneum; the extempore rectal bag was introduced into the rectum and distended with 12 ounces of warm boric lotion, with the result that the bladder was tilted upwards and forwards sufficiently to enable the operation to be performed without any risk of the peritoneum being wounded. I thought that this case might interest other surgeons practising in tropical climates where rubber in the shape of rectal bags and other instruments and appliances is very perishable and where the materials for making such a bag as the one above described can nearly always be easily procured.

STATE CHILDREN'S ASSOCIATION.—The second annual report of this association, the object of which is to obtain individual treatment for children under the guardianship of the State, says that the Bill introduced last session with the object of obtaining for the State further powers of control over neglected children which was unfortunately blocked has again been introduced and has received the sympathy of the Government. The tabulation of results is impossible, but it is noticeable that in the first 14 months of the existence of the association 13 recommendations of the Departmental Committee on Poor-law Schools were carried out, while the present report tells of 10 others which have been adopted or are in course of adoption. The report can be obtained, price 3*d*., at the office of the association, 58, Old Broad-street, E.C., and also of Messrs. P. S. King and Son, 274, Great Smith-street, S.W.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Clinical Examination of the Hæmic Leucocytes.—Dysarthria.

A MEETING of this society was held on April 25th, the President, Mr. BRYANT, being in the chair.

Dr. A. G. PHEAR read a paper on the Clinical Examination of the Hæmic Leucocytes. The purpose of this communication was to lay stress on the advantages of fluid preparations over the cover-slip method more commonly in vogue in the study of the hæmic leucocytes. In the cover-slip method many of the leucocytes were inevitably flattened and distorted in the process of making and fixing the film; some were washed away during the staining of the film; others were obscured by the largely preponderating number of red corpuscles. Distortion rendered accurate measurement and drawing of the cells impossible. In the fluid preparation the white cells were fixed and preserved as approximately spherical bodies; they were undistorted and camera lucida drawings and measurements could be relied on as accurate. The thickness of the unflattened cell was not a disadvantage; by gradually focussing from above downwards through the depth of the cell views could be obtained at different focal planes which were equivalent to a series of horizontal sections and a good idea was gained of the shape and disposition of the nucleus and other structures within the cell. In preparing the fluid film a solution of methylene blue (0·2 per cent.) in 40 per cent. alcohol was used for diluting the blood. The advantage of the alcoholic solution was that it laked the red corpuscles, so that the white cells alone remained conspicuous. A small quantity of the diluting solution was added to a drop of blood on a glass slide and the two were thoroughly mixed by directing a current of air through a pipette on to the surface of the fluid. The fluid was allowed to spread as a thin film under a cover-glass and the edges were then sealed with vaseline. The procedure took about three minutes. The preparation might be examined at leisure with an immersion lens and was available equally for a differential count of the leucocytes and for the study of individual cells. As to the normal leucocytes in fluid films the contour of the polymorphonuclear cells was, with rare exceptions, rounded. Their diameter varied from 9 to 10 μ; this was smaller than the apparent diameter of the flattened cells in dried preparations. With regard to the complex nucleus it could in almost every case be made out, by gradually changing the focus, that connecting strands passed from one lobe to another, the nucleus being, in fact, an undivided elongated body, in places deeply constricted, elsewhere bulged into rounded lobes. The lymphocytes and the large hyaline cells represented the extremes of a single group of cells, the members of which differed in no essential particular save in the amount of protoplasm around the nucleus; all grades between the extreme forms were readily found in normal blood. It was remarkable that the nuclear diameter was fairly constant in the cells of this group, varying only between 4·5 and 5·5 μ. In films prepared by the method advocated a group of cells could be differentiated (large oval cells) which found no place in commonly accepted classifications. The cells were the largest of the normal leucocytes and the only ones whose forms departed notably from the spherical. They might be as much as 14 μ in length. Their contour was oval and the nucleus was large and irregular, usually reniform. The protoplasm became rapidly and uniformly stained an opaque blue colour with methylene blue. The coarsely granular or eosinophile cells (diameter from 9·5 to 10·5 μ) were at once recognised in the film prepared with methylene blue solution notwithstanding the absence of an acid dye; the large refractile granules were conspicuous and were tinged a greenish colour. The cells containing basophile granules (diameter about 8 μ) had a characteristic appearance. The protoplasm contained granules of medium size, many of which were aggregated in one or more deeply stained clumps near the surface of the cell. The non-granular part of the protoplasm was stained a peculiar mauve or purple colour. The nucleus consisted of a number of lobes usually massed at the

centre of the cell and stained a slate or greyish blue colour. A solution containing acetic acid (0·3 per cent.), as sometimes recommended, was not a good medium in which to examine leucocytes, since it rapidly produced changes in their structure and probably destroyed many of the coarsely granular cells. The protoplasmic envelope of the lymphocyte was swollen and in making differential counts the swollen lymphocytes were liable to be estimated as large hyaline cells. Degenerative changes rapidly took place in many of the polymorphonuclear cells, and for these reasons solutions containing acetic acid must be regarded as unsuitable for the dilution of blood. The fluid film made with the alcoholic solution of methylene blue recommended for use was, on the other hand, both convenient and trustworthy. Separate counts over different areas of one preparation gave uniform results, showing that the blood was evenly mingled with the diluting fluid. Not less than 500 cells should be enumerated at a time; the more the better. It was desirable to use a mechanical stage and to work with an immersion lens. The blood should always be procured, if possible, before the first meal of the day was taken, since this was the time at which the influence of meals was least likely to be evident. It was remarkable how small was the range within which the percentages of the commoner forms of leucocyte varied from day to day if this rule be observed. For a healthy individual the following figures represented the limits within which the percentage of the several cells usually lay at the time stated: (1) polymorphonuclear cells, from 45 to 60 per cent.; (2) rounded hyaline cells, from 35 to 45 per cent. (inclusive of lymphocytes, from 10 to 20 per cent., and large hyaline cells, about 2 per cent.); (3) large oval cells, with irregular nuclei, and protoplasm which stained diffusely in solutions of methylene blue, from 5 to 10 per cent.; (4) cells containing coarse oxyphile granules, from 1 to 1·5 per cent.; and (5) cells containing basophile granules, from 0·3 to 1 per cent.—Dr. ALFRED HILLIER asked what was the clinical significance of the variations in the numbers of the various kinds of leucocytes. He also asked in which category Dr. Phear would place the "wandering cell" of Koch and the phagocyte of Metchnikoff.—Dr. PHEAR said that the paper was only a preliminary one and he had purposely left out pathological considerations. He did not know in what class the wandering cell should be placed. The phagocyte would probably be classed as a coarsely granular eosinophile cell.

Dr. PARKES WEBER read a paper on a case of Dysarthria and Delay in Learning to Speak following Cerebral Disturbance in Infancy. The patient who was shown to the society belonged to a healthy family and was seven years of age. The history was that at two years of age he was learning to speak like other children when he was attacked by some acute disease with cerebral symptoms which left him unable to speak, but apparently unaffected in other ways. When seen at five years of age he was able to utter peculiar sounds like those of wild animals, doubtless an attempt at articulate language. He was physically fairly well developed, could hear well, understand what was said to him, and appeared to be of average intelligence. He then gradually began to speak, though with obvious difficulty in getting the sounds out and with great defects in pronunciation, dropping the consonants at the end of most words and replacing the sounds of K, G (hard or soft), Ch and S by a D-sound or T-sound. Such "lalling"-like defects, together with stammering, rendered his speech most imperfect. He could recognise single figures and the letters of the alphabet, but could hardly recognise even short words when shown them on paper. He sometimes made mistakes in writing his own Christian name, although he had doubtless been repeatedly drilled at it. He could not recognise his name when shown it in printed characters. He seemed, in fact, almost word-blind. Such was his condition at the age of seven years, when seen in January, 1899. He was now making rapid progress in pronunciation. Dr. Weber considered that the condition might best be accounted for by supposing that the infantile illness injured the cortex of both cerebral hemispheres chiefly affecting the speech centres (parts concerned in some of the most highly differentiated functions of the brain). The present case and similar cases differ from the typical ones of cerebral diplegia, with bulbar (pseudo-bulbar) symptoms, in the fact that the movements of the palate and the mechanism of swallowing are not in the least affected. The speech defect in this case, as in other similar cases, was probably a minor form of what had been described as "idio-glossia" by Hale White and Golding-Bird, and for which F. Taylor has suggested the terms "idio-arthria" or "idio-phasia." A practical point in regard to the present case and similar cases was that the speech centres, although damaged by some early disease, seemed nevertheless capable of ultimate fairly normal development. This was confirmed in the present instance by the rapid progress which the boy was making since real trouble had been taken in teaching him by the oral and other methods.—Dr. FLETCHER BEACH said that from the description of the case there seemed to be some mental defect. This was especially suggested by his reversing his words when reading, such as "no" for "on," and although he could count he could not do easy sums in which some amount of reasoning was required. In his language he seemed to have reverted to baby language and Dr. Beach asked if there was clear evidence that he had spoken clearly before his illness. The attempt at speech which Dr. Weber described as like wild beasts' noises was often seen in cases of mental defect. Children of this kind were sometimes supposed to be deaf and dumb when they could hear, but had inability to articulate. He thought that with proper teaching by someone accustomed to teach deaf-mutes he would soon improve.—Dr. RUSSELL WELLS related the case of a child who was born at the eighth month and suffered from infantile paralysis affecting one leg during the first year. He was five years before he could talk and then spoke "baby language" and read backwards, reading "saw" for "was." At the present time he was 19 years old and was distinctly above the average in mental attainments, having learned very rapidly the last six years, and he could speak distinctly. He thought that in this and in Dr. Weber's cases there was an arrest of development of the faculty of speech and not any organic lesion.—Dr. SHUTTLEWORTH also thought that the description of the case suggested that there was some backwardness of general mental development, there being paucity of ideas as well as difficulty in expressing them. Reverse writing and reading were common in backward children. Dr. Ashby in examining defective children for the Manchester School Board found that a large proportion wrote "Dog" when told to write "God," and Dr. Shuttleworth had seen this among the defective children whom he had examined for the London School Board. The gutturals and the final consonants appeared to give more difficulty than the other consonants and Max Müller held that these were apt to be omitted in lazy speech and that word-clipping was characteristic of decaying nations. He related the case of a child who was said to have lost his speech at the age of five years after a convulsion during whooping-cough. For some time he could only say a few elementary words, but at the age of 14 years he could hold a conversation with fairly distinct utterance.—Dr. REGINALD LANGDON-DOWN thought that it was unlikely that there had been any local inflammatory lesion as it was difficult to see how meningitis could have selected a small symmetrical region in each hemisphere, and he regarded the case as one of arrested development of the speech faculty.—Dr. WEBER, in reply, thought that if Dr. Beach and Dr. Shuttleworth had had an opportunity of examining the boy they would have agreed that there was no marked mental defect. The reversal of the letters of a word had only been observed on one occasion and his inability to do sums might be due to his age. When he was an in-patient at the German Hospital he was not considered to be defective.

MEDICAL SOCIETY OF LONDON.

Appendicitis.—Effects of Nitrogen Gas in the Excretion of Urea and Uric Acid.—Relative Excretion of the Nitrogenous Waste Products in a Case of Liver Abscess.

A MEETING of this society was held on April 24th, Mr. J. H. MORGAN being in the chair.

Mr. H. BETHAM ROBINSON read a paper on Some Complicated Cases of Appendicitis in which the abscess in relation with the appendix was attended by suppuration later in the neighbourhood of the liver. This infection of the peritoneum is very liable to spread along the ascending colon when the adhesions are defective and possibly aided by the recumbent position and natural curve of the lumbar region. The pus collects in the right hypochondrium in the space between the inferior surface of the liver, the upper part of the right kidney, and the hepatic

flexure of the colon with a possible extension over the anterior and superior surfaces to form a sub-diaphragmatic collection. Four cases were detailed as illustrating this sequence of events. In the first case a male, aged 18 years, was admitted into the hospital with a first attack on the second day of illness having a well-marked localised mass in the right iliac fossa. As it was evident that he had a fluid collection an exploration was made the next day. The appendix was found to be gangrenous on one side and stinking semi-purulent fluid was evacuated. His temperature dropped for a little while and then rose again; in connexion with a fluid collection beneath the liver. This was opened by an incision parallel to the costal margin running into the loin and drained. His progress afterwards was slow but quite satisfactory. The second case was that of a little girl, eight years of age, who was admitted into the Children's Hospital, Shadwell, on the fourth day of illness with a well-marked lump in the right iliac fossa; there was no history of any previous attack. On the eighth day it was evident that there was a collection of fluid, and this was opened, setting free a considerable quantity of offensive pus. The appendix was embedded in adhesions and no perforation was found. After an apparent quiescence there was a fresh rise of temperature associated with a collection below the liver. This was explored on the fifteenth day and about half a pint of pus was evacuated. Except for a little jaundice there was no further trouble. The next case was that of a boy, aged 16 years, who was admitted into the hospital with a collection of fluid in the pelvis and lower abdomen and who gave a history of appendix trouble starting some four weeks previously. This was opened in the right iliac region and a large quantity of pus was evacuated which had been shut in by adherent small intestine; the appendix was not found. His progress for a week was satisfactory and then he developed a parotid bubo on the left side which suppurated and was opened. After another fortnight his liver dulness was found to be raised and this was associated with signs of fluid at the right base. An exploration was made below the margin of the ribs and the liver proved to have dense adhesions on both the upper and under surfaces; no pus was discovered. A hypodermic needle was passed into the pleura but only with a negative result. After this his nightly rise of temperature with emaciation strongly suggested pus or tuberculosis. As some œdema was noticed over the right lower spaces laterally a portion of the tenth rib was removed and foul pus was set free from a localised cavity. From this time on he gradually improved, leaving the hospital after a stay of about three months. There was no actual proof in this patient of any sub-diaphragmatic collection, but the lung signs ending in the empyema gave some colouring to this view. The last of the four cases, that of a boy, 12 years of age, was of a different type but it was a case of considerable interest in which the patient after the symptoms of appendicitis developed a small abscess in the abdominal wall below the costal margin outside the rectus. This on exploration was proved to have tracked upwards from the pelvis, where there was another small collection, a granulating track uniting the two. Subsequently a fæcal fistula formed which contracted up to a very small hole after an unsuccessful effort to close it. The difficulty was to determine whether the pus below the costal arch was extra-peritoneal or intra-peritoneal, the infection having travelled up the colon; taking the whole lesion into consideration an intra-peritoneal course seemed the more likely.—Mr. J. H. MORGAN said that the series of cases which had been brought forward presented sequelæ which were most unusual and that Mr. Robinson was to be congratulated upon the results which he had obtained in these complicated cases.—Mr. BATTLE, after congratulating Mr. Robinson on his results, mentioned a case of sub-diaphragmatic abscess in a boy who was admitted to the hospital with acute suppurative peritonitis of four days' duration. The appendix was removed but the boy developed a sub-diaphragmatic abscess which made its way into the pleura and the patient was eventually relieved by an extensive resection of ribs. These collections track up along the peritoneal surface of the bowel and collect on the under surface of the diaphragm. In two other cases he had failed to reach the abscesses owing to their small size and they were only found at the necropsy.—Dr. HADLEY related a case of localised peritonitis in the upper part of the abdomen. This was opened. The patient then developed signs of fluid at the base of the right lung; this gradually cleared up, but the sinus beneath the liver still continued to discharge. This was again explored and the abscess cavity was found to track down to the cæcum.—Mr. MCADAM ECCLES said that these collections of pus were intra-peritoneal and not subserous, the pus tracking up along the surface of the bowel. He mentioned the case of a boy with a collection of pus in the right iliac fossa; this was opened, but another collection developed in the right lumbar region just below the kidney. He thought that the tracking of pus was due to imperfect drainage and suggested that a counter incision should be made in the loin.—Mr. H. B. ROBINSON said, in reply, that he did not think it necessary to make a counter incision in all cases as the majority did well without it, although under certain conditions it might be necessary.

Mr. W. ARMSTRONG (Buxton) read a paper on the Effects of Nitrogen Gas in the Excretion of Urea and Uric Acid. He said that he had tested the urine of a number of patients most of whom suffered from gout and had verified the observations of Dr. Luff that in the great majority of cases the amount of uric acid excreted was below the normal, but he had also observed that while drinking or bathing in the Buxton thermal waters there was a constant and in many cases a considerable increase in the uric acid excretion. He thought it probable that nitrogen gas which was present in very large quantity in these waters, although generally regarded as therapeutically inert, accounted for the relief which the gouty experienced from the use of these waters. A long series of observations had been made, not only on himself but also on a number of patients, in order to prove the point, and the results obtained from this investigation were as follows: 1. That the excretion of uric acid and urea (more especially of the former) and also the flow of urine is largely increased by the drinking of or by immersion in the Buxton thermal water. 2. That it is even more efficacious when bathed in than when drunk as regards the excretion of uric acid. 3. That the diuresis is somewhat greater when the water is drunk than when it is used as a bath. 4. That any deviation from the normal temperature either by heating or cooling interferes with its efficacy. 5. That the alteration in temperature would not be likely to prejudice the therapeutic properties of the salts, but that, on the other hand, it would greatly interfere with the contained gases. 6. It being generally conceded that while the skin will not absorb water and salts it will take in gas readily the effects of the bathing may be due to this factor. 7. That under ordinary circumstances the higher the temperature to which a bath is raised the more likely it is to bring about an acute attack of gout. With these waters, however, the tendency while powerfully shown by an 82° bath became less evident with each increased degree of heat, the patient feeling perhaps stiffer and sorer, but an acute attack rarely coming on.—Dr. LUFF said that the observations of Mr. Armstrong that there was a diminution in the quantity of uric acid in the urine before an attack of gout agreed with the results which he had obtained some time previously, although opposed to the generally accepted view that there was an increased excretion of uric acid in the period preceding an attack. He was quite prepared to think that nitrogen as it occurred in the natural water had some remarkable action in increasing the amount of uric acid excreted in spite of the fact that it was generally regarded as an inert gas. In reference to this point he said that he had shown that the ash of certain vegetables had a marked solvent effect on uric acid, whereas the artificial ash of apparently exactly the same composition had no such effect.

Mr. WILLIAM BAIN (Harrogate) read a paper on the Relative Excretion of the Nitrogenous Waste Products in a case of Liver Abscess. The patient was admitted into St. Thomas's Hospital under the care of Mr. Makins on Nov. 17th and died on Dec. 23rd. Four months previously to admission he had had an attack of dysentery in China which recurred a few weeks later accompanied by jaundice. Four days after a preliminary operation Mr. Makins inserted a trocar and cannula into the liver, when 48 ounces of chocolate-coloured pus welled up. The wound continued to discharge large quantities of fluid daily and the patient became progressively weaker. At the necropsy the liver was greatly enlarged and in the right lobe were six abscess-like areas, on an average of about the size of an orange, one of which had been drained by operation. The substance of the right lobe was obviously diseased, being of a mottled red-and-white colour. Apart

from two small ulcers in the intestine and the cortex of both kidneys being thickened, the remaining organs were normal. The urine of the 24 hours was collected and submitted to analysis. Quantitative estimations were made of the urea, uric acid, phosphoric acid, ammonia, lactic acid, and alloxuric bases. Taking into consideration the diet and excluding lactic acid, which was only estimated when the patient was in a semi-moribund condition, the results obtained were regarded as coming within the normal physiological variations. The interest in these results lay in the fact that although considerable portions of the liver were distinctly abnormal, yet its functions apparently were efficiently performed.

HARVEIAN SOCIETY OF LONDON.

Exhibition of Cases.

A CLINICAL meeting of this society was held on April 20th, Mr. H. E. JULER, President, being in the chair.

Mr. JACKSON CLARKE showed a girl, aged three and a half years, suffering from Unilateral Coxa Vara. The patient when first brought to hospital walked with a pronounced limp, the body lurching to the left when the foot of that side was placed upon the ground. On examination the left great trochanter was found to be nearly on a level with the anterior superior iliac spine. There was neither eversion nor inversion of the limb and the head of the femur was felt to move smoothly in the acetabulum. The patient had severe rickets. The treatment adopted in this case consisted in the use of an extension apparatus which was worn continuously.

Mr. JACKSON CLARKE also showed photographs of a girl, aged six years, who had Congenital Dislocation on the Left Side. The trochanter in this case had been two inches above Nélaton's line and on manipulating the limb the head of the femur was felt to move about on the surface of the ilium. Mr. Clarke reduced the dislocation by Lorenz's method under anæsthesia. It was not until the final movement—that of abduction—was made that the head of the femur was felt and heard to slip into its socket. The thigh was then fixed in the completely abducted and partly everted position by plaster bandages reaching from the iliac crests to the foot. This position was maintained for 10 weeks when the bandage was replaced by another with a slightly diminished degree of abduction. The patient now wears a steel instrument and a considerable degree of abduction is kept up, the patient walking with a patten on the right foot. When the instrument is properly adjusted the head of the femur is in the acetabulum. The now extensive experience of the results of Lorenz's bloodless method of reduction had proved that congenital dislocation of the hip up to a certain age was a curable affection.—In answer to Mr. ROUGHTON Mr. CLARKE said he thought that some cases of coxa vara were of the nature of green-stick fracture of the neck of the femur.

Dr. ROBERT MAGUIRE showed a woman who presented the physical signs of an Aneurysm Involving the Arch of the Aorta and the Innominate Artery. Dr. Maguire had seen very little good result in such cases from prolonged rest in bed and low diet.—Dr. HARRY CAMPBELL noticed that Dr. Maguire attributed the arterial sclerosis in this patient to syphilis and asked whether a connexion between the two had been definitely established. He thought that the patient had granular kidneys as the heart was hypertrophied and there was albuminuria. He suggested by way of treatment the introduction into the aneurysm, through an insulated trocar, of several feet of fine-drawn gold wire and the employment of a mild galvanic current, the wire being left *in situ*, a method which had yielded good results. He did not think that patients with thoracic aneurysm should be doomed to months of enforced rest.—Dr. CAUTLEY expressed surprise at the unfavourable opinion Dr. Maguire had formed of the treatment by rest and low diet. Although hospital patients were rarely suitable subjects, seeing that the aneurysm was commonly due to a combination of strain, alcohol, and syphilis, he maintained that among the better classes good results could sometimes be obtained by strict Tufnell's treatment. He referred to a very severe case of aneurysm of the transverse part of the arch of the aorta due to strain in a man aged 37 years. After a diet of six ounces of solid food and eight ounces of liquid daily, with absolute rest, for a period of 10 weeks the patient recovered completely and lived for another 25 years without any recurrence. Similar good results might still be obtained in suitable cases.—The case was also discussed by the PRESIDENT and Mr. RAYMOND JOHNSON.—Dr. MAGUIRE replied.

Mr. ROUGHTON showed a man who in December last sustained a Simple Fracture of the Humerus extending from the deltoid insertion obliquely upwards for about two and a half inches. As it was found impossible to keep the fragments in apposition by means of splints Mr. Roughton cut down upon the fracture and secured the ends by means of two silver wires passed horizontally round the bone. The patient recovered with a shapely and freely moveable arm. The position of the wires and of the fracture after operation was demonstrated by a skiagraph.

Dr. WHITFIELD showed a woman, aged 56 years, who was the subject of Extensive Lupus Erythematosus of 10 years' duration. The eruption began behind the left ear and had gradually spread causing a bald cicatricial patch reaching nearly up to the occipital protuberance. The edges of the patch when the disease was still active were red and somewhat infiltrated. On the nose and both cheeks were numerous discoid patches showing very little tendency to involution and large areas of fine white scarring. Both ears were extensively affected on the inner aspect of the conchæ. The patient presented no evidence of any other organic disease.—In reply to the PRESIDENT Dr. WHITFIELD said that the treatment of lupus erythematosus might be divided into "palliative" and "active." In the first class he would include the use of soothing and protective lotions, powders, and ointments, and in the second the use of such drugs as pyrogallic acid, chrysarobin, and the oxydised compounds of these drugs, mercurial ointments and plasters, also operative measures such as scarification and the application of the fine galvano-cautery. He proposed in this case later to use mercurial applications and if these did not succeed he should try the effect of tattooing the spreading edges with the galvano-cautery, as he had seen great benefit from this line of treatment in obstinate cases of the disease. It was necessary to reserve all the active forms of treatment for use when the disease had been reduced to as quiescent a state as possible, otherwise one was liable to do more harm than good.

Dr. JAMES TAYLOR brought forward a well-marked case of Disseminated Sclerosis occurring in a young girl.—In answer to a question by Dr. HARRY CAMPBELL it was stated that there was no defect of speech and no emotional excitability. The patient was gradually getting worse and it was considered that the prognosis was hopelessly bad.

Dr. HARRY CAMPBELL showed a case of Complete Paralysis and Atrophy of the Scapular Portion of the Trapezius apparently due to the involvement of the spinal accessory nerve in an old cicatrix. The case showed the important part taken by this muscle in keeping the scapula in position. The bone was considerably altered in position, the glenoid cavity looking downwards and outwards and the inferior angle projecting as in "winged" scapulæ; the outer part of the clavicle was bent downwards by the fall of the acromion and coracoid process. The patient showed an occasional tendency to a form of wry-neck from over-action of the opposite trapezius.—In answer to Dr. JAFFE Dr. CAMPBELL stated that the lower part of the muscle showed the reaction of degeneration.

Dr. LEONARD GUTHRIE demonstrated upon a case of Locomotor Ataxy the treatment of the disease by specially arranged exercises as suggested by Frenkel. The power of coördination had been considerably improved.

BRITISH GYNÆCOLOGICAL SOCIETY.

Abdominal Causes of Death after Cœliotomy.

A MEETING of this society was held on April 13th, Dr. H. MACNAUGHTON-JONES, President, being in the chair.

Dr. W. J. SMYLY read a paper on Deaths after Cœliotomy. In this paper, which we shall publish in full at an early date, he considered those deaths under the eight heads of shock, hæmorrhage, ileus, uræmia, inanition, tetanus, embolism, and sepsis, most attention being devoted to shock.

The PRESIDENT observed that the paper touched on all those vital points in the post-operative period which made even the most experienced operator anxious and the interest in them was universal.

Professor JAPP SINCLAIR (Manchester) said that on all essential points he found himself in entire accord with Dr. Smyly. All the cases of shock which he had seen had been due to hæmorrhage. He therefore looked on shock and hæmorrhage as equivalent, with a very few exceptions, such as cases of heart disease. One cause of death was a want of tone in the bowel, which in some cases was chronic, the result of chronic constipation. These patients might go on all right for a few days, then symptoms of intestinal paresis came on and the patient succumbed. With regard to peritonitis he believed that there was a non-septic form and in these cases purgation was successful, but he did not believe that purgation succeeded when the peritonitis was septic; on the contrary, it might make matters worse. As far as he knew no micro-organism except the streptococcus led necessarily to a fatal result. His experience of anti-streptococcic serum coincided with that of Dr. Smyly. The serum might reduce temperature, but he had not seen a case where it had saved the patient's life.

Dr. WILLIAM WALTER (Manchester) thought that Dr. Smyly was right in drawing attention to shock as in itself a cause of death. The best way to prepare against the tendency to shock was to fortify the heart's action with strychnine and to operate in a warm room, guarding against cooling of the intestines with warm compresses, &c. Perhaps the best thing of all was the Trendelenburg position; since this had been introduced patients seemed to bear difficult operations much better. It was often difficult to diagnose shock from internal hæmorrhage. Proper attention to the pedicle was one of the most important safeguards against hæmorrhage. If it were necessary to reopen for hæmorrhage he advocated the plan of opening the vagina instead of the abdomen, washing out with very hot water, and packing with gauze.

Dr. GEORGE ELDER (Nottingham) observed that shock was not so often seen at the present time as formerly because operations were now done more quickly and under better conditions. No doubt many deaths formerly put down to shock were really due to hæmorrhage. There was one symptom which he had not seen described but which he believed to be pathognomonic of hæmorrhage—viz., intense pain, of a shooting character, uncontrolled by morphia. He was surprised to hear Dr. Smyly give the credit of aseptic surgery to Bantock and Tait. He was himself an old pupil of Lister and he felt sure that what they knew of asepsis was due entirely to the untiring efforts of Lister during the last 25 years. There was one kind of sepsis which no antiseptic precautions could get rid of and which only time could render harmless and that was the sepsis arising from operations for puerperal peritonitis or for the clearing out of a putrid placenta.

Mr. J. W. TAYLOR (Birmingham) said that he did not think that he had ever seen a death due directly to shock, though he had seen cases where death was due to sepsis, predisposed to by hæmorrhage and shock. As regards ileus he thought the use of dry sponges might lead to it, for he had had more difficulty in getting the bowels open after the use of dry than after moist asepsis. He believed that the three chief factors in the production of sepsis were sponges, hands, and the breath of the operator. He always tried to get the bowels open by six o'clock on the morning following the day of operation; if they were not opened then he gave small doses of calomel. Another way to combat sepsis in cases where the kidneys were acting badly was by means of the hot-air bath; he believed he had seen this treatment save several patients.

Dr. HEYWOOD SMITH said that a point which Dr. Smyly had omitted was the question of the idiosyncracy of the patient. There were some patients who were described as slow healers and who tended to go to the bad, and it was well to keep such cases some days in hospital before operation. With regard to sepsis he would observe that there were many different practices with regard to ligature material; he was sure that catgut had caused inflammation in some cases. As every time-saving detail was of importance he thought that Greig Smith's forceps-needle was a useful thing; it was a fine pointed forceps, passed through the tissues as a pedicle-needle; it was then opened and the ligature could be rapidly seized and drawn through.

Dr. DUDLEY BUXTON said that there was one aspect of anæsthetics which bore upon the discussion—viz., the relation of chloroform to shock. The shock of operation was to a great extent caused or enhanced by the physical effect of chloroform, which was most marked in anæmic persons and in those who had lost much blood during operation; and the explanation of the action of chloroform under these conditions was to be found in the alteration of pressure of the abdominal contents after the abdomen had been opened. The Trendelenburg position minimised shock by assisting gravity in the prevention of cerebral anæmia. Another important point about chloroform was its liability to cause post-operative hæmorrhage.

Dr. THOMAS EASTES (Folkestone) mentioned two cases of pseudo-ileus. The first was that of a patient suffering from myoma and ovarian cyst. The latter was removed by ovariotomy, the myoma being left. After a few days symptoms of ileus came on. He opened the abdomen and put a tube into the colon, but the patient died, and he thought that death was due to the myoma acting as a ball-valve and keeping up the obstruction. In the other case the obstructive symptoms were due to hæmatocele and he stopped all feeding by the mouth, gave nutrient and aperient enemata, and small doses of calomel. The result was satisfactory.

Dr. R. T. SMITH believed that patients might die from simple shock. Thus he had had a case of double ovariotomy; the operation presented no difficulty, but an hour after the patient's pulse was 160 and she died in two days. The necropsy showed no hæmorrhage or other cause of death and he believed that it was due to vaso-motor paralysis.

Mr. CHARLES RYALL said that there were cases where the shock was quite out of proportion to the time taken by the operation, such as operations involving the mesentery and hysterectomy. There was always shock at the moment when the uterus was being severed. In the preventive treatment of shock flushing the abdominal cavity was a good thing.

Dr. SMYLY observed that he had no idea of detracting from Lister's fame; antisepsis came first, asepsis later, and that in consequence of antisepsis. But Tait first showed that antiseptics were not only useless but injurious to fresh wounds; he also emphasised the importance of avoiding contamination of the operator's hands and this teaching had led to the modern aseptic methods.

The PRESIDENT said that he believed that death from shock was almost always due either to hæmorrhage or to operation on a patient whose condition was not good enough for operation. The kind of case that he most dreaded operating on was not the patient who thought she was going to die, but rather the nervous woman who threw herself about after operation. To tie her down and to give her freedom both had drawbacks: in the former case the patient got worse and in the latter she might break open the wound.

LIVERPOOL MEDICAL INSTITUTION.—A meeting of the Pathological and Microscopical Section of this society was held on April 20th, Dr. Karl Grossmann being in the chair.—Dr. John Hay gave an account of a case of Stenosis of the Conus Arteriosus Dexter. He demonstrated that in the normal heart the cavity of the right ventricle might be divided into two parts—the sinus and the conus—which were frequently marked off from one another by a muscular constriction. In this case the narrowing was so great as to produce obstruction. There was great hypertrophy of the right heart and there were large vegetations in the conus and on the pulmonary cusps. The septum was complete and the ductus arteriosus was closed. There was no evidence pointing to congenital heart disease. The heart was obtained from a female subject, aged 20 years. Dr. Hay fully illustrated his remarks by specially prepared specimens, by casts of the cardiac cavities, and by lantern slides.—Dr. Abram read a note on a case of a rare Lesion of the Kidney believed to be a carcinoma affecting the glomeruli and giving rise to numerous secondary growths.—These notes were discussed by Dr. Lowenthal, Dr. Buchanan, Mr. Larkin, Dr. Barr, and Dr. Archer.—The following specimens were shown:—Dr. Nathan Raw: Organs from a case of Cancer of the Breast containing a large amount of secondary deposit.—Mr. Thelwall Thomas: Implantation Cysts of the Hand and Finger.—Mr. Douglas Crawford: A Right Ovarian Dermoid obtained from a multiparous woman, aged 32 years. The tumour at the time of operation was in a state of infarction from twisting of the pedicle.—Mr. Hawkins-Ambler showed a specimen of Villous Cancer of the Cervix Uteri. The specimen was obtained from masses removed by curetting as a preliminary to hysterectomy.—Mr. Newbolt: (1) Portions of a Knee-joint of a woman, aged 29 years, excised for Rheumatoid Arthritis of five years' duration and accompanied by great pain; (2) an Epithelioma of the Antrum from a man, aged 53 years; and (3) an Adeno-myxoma of the Parotid.—Dr. Buchanan: (1) Urethral Caruncle; (2) Fibroid Epulis; and (3) some

Red Crystals in a Specimen of Sputum stained for Tubercle Bacilli. These closely resembled and were easily mistaken for tubercle bacilli, but it was shown that they were crystals, probably precipitated from the carbol-fuchsin.—Mr. Larkin showed: (1) An Exostosis of the size of an orange which had grown from the venter scapulæ close to the vertebral border and just below the level of the spine; and (2) a Large Fibroma of the Skin of the Front of the Thigh.—Dr. R. C. Dun: (1) A Fibrous Epulis from a lad aged nine years; and (2) Two Phosphatic Vesical Calculi removed from boys aged nine and two and a half years respectively.—Dr. Abram: A Series of Museum Specimens prepared by a modification of Jore's method.—Dr. John Hay: Malignant Pustule of the Neck.—Dr. Grossmann: An Unopened Eyeball in which a foreign body had been localised by an x-ray method which he had already described to the institution. The eyeball was opened in the presence of members and the body was found at the expected site.—Several members discussed the specimens.

ÆSCULAPIAN SOCIETY OF LONDON.—A meeting of this society was held on April 21st, the President, Mr. D. H. Goodsall, being in the chair.—The President showed: 1. A man, aged 59 years, who falling on the shoulder Luxated the Acromial End of the Clavicle Upwards. Though this happened but nine days previously movement of the arm was good and painless, though the deformity persisted. 2. A woman, aged 22 years, with a seven-year-old Crural Ulcer resulting from injury and not kept up by varicose veins. He treated the condition by his usual method, Luke's, and after a few days' treatment there was improvement in the edges which were hard and thick and the base was now red and filling up. Mr. Goodsall had had no failure by this method.—Dr. B. G. Morison showed a woman, aged 21 years, with a Large Scar in the Posterior Triangle resulting from Suppurative Adenitis, who when this was healing developed tuberculous suppurating foci in the skin of the legs about the calves. These were treated satisfactorily by incision and local applications of iodoform, cupric sulphate, and creasote ointment. There was a family history of tuberculosis.—Mr. W. Campbell M'Donnell read notes on a case of Poisoning by 7·5 cubic centimetres of Oil of Bitter Almonds in a woman, aged 28 years, who was found on the floor unconscious, constantly moaning, cold, cyanosed, foaming at the mouth, and breathing quickly. Her breath smelt strongly of bitter almonds, her pulse was 96 per minute, her pupils were large and insensitive, there was absence of conjunctival reflex, her head and eyes were fixed to the left, the jaws were fixed, there was inability to swallow, all segments of all limbs were somewhat rigid, and there was slight retching at frequent intervals. After two hypodermic injections of solution of strychnia B.P. at 10 minutes interval, the pupils became smaller and sensitive, and the conjunctival reflex was detected. About four hours later she vomited and in 12 hours the cyanosis passed, recovery following.

BIRKENHEAD MEDICAL SOCIETY.—A meeting of this society was held on April 7th, Mr. S. H. Nazeby Harrington, President, being in the chair.—Mr. R. T. Hughes read notes on a case of Peritonitis with Obstruction.—Dr. Owen Morris gave some After-notes on a Case for Diagnosis which he had shown at a previous meeting.—A paper was read by Mr. H. L. Pearson on Sewer Venting and Sewer Ventilation. He pointed out that the escape of abominable smells into the roadway from sewers was a disagreeable nuisance, but when it became a question whether such a nuisance was a nuisance dangerous to health sanitary experts did not all stand upon the same ground. After quoting the opinions of several distinguished medical officers of health who were in favour of continuing the existing method of ventilating sewers by means of open grids in the roadway Mr. Pearson gave instances of several cases of illness occurring in his own experience which were distinctly traceable to emanations arising from sewers opened for purposes of repair. In conclusion Mr. Pearson strongly advocated the closing of all road grids, making it imperative at the same time that every soil pipe should be fitted with a ventilating shaft of its own diameter. He would give up the idea of ventilating the sewer—that is to say, of trying to make the air in the sewer sweet—for he held the opinion that the proper place for sewer-air was the sewer itself. He would abolish the word "ventilate" altogether and only deal with sewer venting.—Dr. Marsden, Dr. Morris, and Dr. Pinkerton criticised the paper.

Reviews and Notices of Books.

Diseases of the Skin: an Outline of the Principles and Practice of Dermatology. By MALCOLM MORRIS, F.R.C.S. Edin., Surgeon to the Skin Department, St. Mary's Hospital, London, &c. With 10 Coloured Plates and 26 Engravings. New and Revised Edition. London, Paris, New York, and Melbourne: Cassell and Company. 1898. Pp. 589. Price 10*s.*

EVER since its first appearance in 1893 Mr. Malcolm Morris's "Diseases of the Skin" has been universally recognised as the most concise and most readable of all the treatises on dermatology in the English language and this recognition has been accorded to it, not only by students and others desirous of studying the subject, but by dermatologists. The style is clear and the descriptions are amply sufficient for all ordinary purposes without being needlessly long. A very great feature is made of the sections on treatment and this portion of the work is especially good, and that is as it should be, for works on diseases of the skin are in more request for suggestions for treatment than for diagnosis. We notice in this edition that the account of the treatment of each disease immediately follows the account of the disease; this is a decided improvement and should prove of much convenience to the reader. To mention in the first place the changes which have been made for this edition we find on examination that the whole work has been thoroughly revised and that there are very few portions of the book which have not undergone some modification. It is probable that the chapter dealing with ringworm has been more altered than any other, for the changes which have taken place in our views with regard to this disease, or rather group of diseases, have been very great during the few years which have elapsed since the last edition appeared. This is a somewhat difficult subject to explain clearly to those who have been educated in the views which formerly prevailed and we examined with some curiosity to see how the author had acquitted himself of this task. We can say unhesitatingly that Mr. Morris has been successful and we would suggest a perusal of this chapter to all who have not yet formed clear ideas of the present state of knowledge of this complex subject. A good account is given of the methods of examining and staining affected hairs and we endorse fully the author's remarks that the use of a caustic alkali in the preparation of the hair for examination does not lead to the best results.

The classification of the diseases of the skin which Mr. Morris has adopted is based on etiology and this is undoubtedly the true basis. At present, however, our knowledge of the causes of many morbid conditions of the skin is too incomplete to enable us to make an exact classification and the author has acted wisely in not attempting to force some diseases such as psoriasis, about the essential causes of which we know little or nothing, into any position which might ultimately prove quite unsuited for it.

Of only one of the definitions in the book do we feel it necessary to express our disapproval. The word "eczema" has at different times had various significations and Mr. Morris tells us that he uses the term in this book as "connoting a catarrhal inflammation of the skin originating without external irritation and characterised in some stage of its evolution by serous exudation." The only words of this definition with which we cannot agree are the four words, "originating without external irritation." There was a time indeed when the eczematous process was considered to be a pathological condition quite apart from anything which could be produced artificially, but we know now that the whole of the pathological process is identical in the two

cases and this the author freely acknowledges, but he says that "artificial eczema runs a definite course and the process is always under the patient's own control—to this extent at least that he can at any time interrupt the action of the irritant, when, as a rule, the eruption will at once begin to subside." This is quite true, but it is true merely because the irritant is known; if the irritant be overlooked then even Mr. Morris will not refuse to call the process "eczematous." As knowledge extends of the etiology of simple catarrhal inflammations of the skin we find more and more of these conditions to be connected with definite external irritants, and though many will always remain as the products of causes acting from within, yet many of the conditions acknowledged by all to be eczematous now will undoubtedly be shown to be associated with the presence of bacteria on the surface of the skin. Why, then, should we deny to those cases in which the cause is known the title which we all freely concede to cases where the cause has not been ascertained? We hope that in the next edition the author will no longer distinguish between eczema and traumatic dermatitis. For the account of the clinical varieties of eczema we have nothing but praise. The illustrations are good and numerous; it would, perhaps, have been well to indicate in the plates of micro-organisms the magnification employed.

We have much pleasure in recommending this new edition as fully up to date and as a very satisfactory exposition of the diseases of the skin within a moderate compass.

Ocular Therapeutics for Physicians and Students. By F. W. MAX OHLEMANN, M.D., late Assistant Physician in the Ophthalmological Clinical Institute of the Royal Prussian University of Berlin. Translated and edited by CHARLES A. OLIVER, A.M., M.D., one of the Ophthalmic Surgeons to the Philadelphia Hospital, U.S. London: H. Kimpton. 1899. Pp. 274. Price 7*s.* 6*d.* net.

THIS work is divided into two parts, the first of which is occupied with an enumeration of the different remedies employed in ophthalmic practice and a description of their action and uses, thus enabling the practitioner to select, without hunting through many books, one out of many remedies having the same object in view, whilst the second part specifies the various diseases of the eye without entering into unnecessary details and gives the treatment recommended and practised by the best authorities. The doses of the drugs used internally or applied externally are given both on the metric system and in English weights and measures. The agents mentioned are considered under the heads of Mechanical Treatment, such as Massage; Thermic Remedies; Chemical Agents, such as Antiseptics, Astringents, Alkaloids, Narcotics, and Local Anæsthetics; Electricity; and finally General Treatment, which includes Protective Means and Blood-letting. The introduction of many new remedies into ophthalmic practice has led to formulæ which are rather startling, such, for example, as sodii sozo-iodolicum petrolatum, dermatol, europhen, aristol formaldehyde, ephedrin, and others.

Some slips of the pen are noticeable, such as vaselini albæ and lanolini purissæ amylis. As might be expected, the diseases of the conjunctiva and of the cornea present the greatest variety of treatment and a large selection of remedies is here offered to the practitioner who, if he be able to diagnose this and other disease, will have little difficulty in finding the appropriate treatment. We are glad to see that the merits of chlorine water and of corrosive sublimate are duly recognised as proving of great service in various inflammatory affections of the eye and the short chapter on the application of electricity is good. On the whole, however, the volume does not appear to offer any striking novelty or to contain any plans of treatment that are not to be found in one of the larger treatises on the diseases of the eye.

LIBRARY TABLE.

On Villous Growths and the Common Affections of the Rectum. By THOMAS BRYANT, M.Ch. R.U.I. (Hon.), F.R.C.S. Eng., F.R.C.S. Irel. (Hon.), President of the Royal Medical and Chirurgical Society of London, Consulting Surgeon to Guy's Hospital, &c. Illustrated. London: The Medical Publishing Company, Limited. 1899. Pp. 52. Price 3*s.* 6*d.*—These valuable papers on some important diseases of the rectum appeared in THE LANCET in 1897 and we think Mr. Bryant has done well in letting them re-appear in book form. Villous growths of the rectum are certainly often overlooked and the results of operation for this condition are so good that it is highly desirable that the tumour should be diagnosed as early as possible. Mr. Bryant's account is clear and is illustrated by the notes of 13 of the cases which he has had under his care. The book also contains a good description of the methods of examining the rectum and of the more common diseases which affect it, such as hæmorrhoids and ulcer. There are 25 illustrations, most of which are reproductions of drawings made by the late Mr. P. Y. Gowlland, and as he was a surgeon as well as an artist these are exceptionally accurate and good. Anyone who has to treat diseases of the rectum will derive profit from the perusal of this little volume.

The Treatment of Lateral Curvature of the Spine, with Appendix, giving an Analysis of 1000 Consecutive Cases treated by Posture and Exercise exclusively (without Mechanical Supports). By BERNARD ROTH, F.R.C.S. Eng., Orthopædic Surgeon to the Royal Alexandra Hospital for Sick Children, Brighton, &c. Second edition. London: H. K. Lewis. 1899. Pp. 141. Price 10*s.* 6*d.*—This second edition has been entirely re-written and re-arranged. In speaking of the first edition in 1889 we expressed the hope that this book would do something to check the unscientific and often disastrous treatment of lateral curvature of the spine by spinal supports and prolonged rest and this new edition is even better calculated to show the good results which may be obtained in lateral curvature by posture and by exercise. Not that we would wish to be thought to condemn all mechanical treatment of lateral curvature, for mechanical appliances have in certain cases their uses, but it is very easy to over-use them and the average case is far better without them. Mr. Roth's book is accompanied by an interesting appendix, in which particulars are given of 1000 consecutive cases of lateral curvature which he has treated without mechanical support. There are two plates of life-size cyrtometric tracings of cases of lateral curvature and many illustrations have been added. This work will form a useful book for anyone who wishes to know what can be done by judicious treatment in these troublesome cases.

T. J. and J. Smith's Professional Appointment Diary. London: T. J. Smith and Downes. 1899. Price 10*s.* 6*d.*—We only received this diary in April and think it somewhat late in the year for a diary to be sent for review. However, we must allow that for a busy man it should be found very convenient. Each page comprises a day, divided into half-hours, from 9 A.M. to 8.30 P.M. At the beginning of the book are some pages of various information and at the end of the book are other pages ruled as a cash register.

Les Verres Isométropes. Par le Dr. DE BOURGON. Paris: A. Maloine. 1899. Pp. 192. Price 5 francs.—This work has for its object the introduction into practical work, and especially into the manufacture of spectacle lenses, of a new kind of glass the composition of which is preserved as a secret but which is said to be harder and more homogeneous and transparent and to have a density of 3·170 against about 2·6, which represents that of crown glass; it is also claimed that the index of refraction is more constant. We commend the book to the attention of the optician.

JOURNALS.

The Journal of Anatomy and Physiology. Conducted by Professor Sir WILLIAM TURNER, F.R.S., Professor D. J. CUNNINGHAM, F.R.S., G. S. HUNTINGTON, M.D., Professor A. MACALISTER, F.R.S., and Professor J. G. MCKENDRICK, F.R.S. Vol. XXXIII. New Series. Vol. XIII., Part 3. April, 1899. London: Charles Griffin and Co. Price 6*s.*—The first article in this number is by Professor Arthur Thomson, on the Sexual Differences of the Fœtal Pelvis, with two plates, and he has satisfied himself that, as Fehling stated some time ago, the differences in form and appearance are such as to enable the observer to discriminate between the pelvis of the male and that of the female as early as the third month of fœtal life. The article is devoted to a description of these points. 2. Mr. B. H. Buxton, photographs of a series of Sections of an Early Human Embryo, with eleven plates, each containing four figures. 3. Dr. Bishop Harman, the Pelvic Splanchnic Nerves, an examination into their range and character, with 13 plates. The number of fibres in each root and their distribution are given in much detail. 4. Dr. Frederick Craven Moore, Demonstrator and Assistant Lecturer on Pathology, Owens College, Manchester, Unilateral Renal Aplasia or Unsymmetrical Kidney. 5. Dr. Robert J. Terry, Demonstrator of Anatomy in the Missouri College of St. Louis, U.S.A., Rudimentary Clavicles and other Abnormalities of the Skeleton of a White Woman. In addition to the above the alveolar processes were absent in both jaws. The skull presented some unusual features both as to form and sutures. The coccyx consisted of four several bones. 6. Dr. Peter Thompson, Senior Demonstrator of Anatomy in Owens College, Manchester, on the Levator Ani or Ischio-anal Muscle of Ungulates, with special reference to its Morphology. 7. Dr. Byron Robinson, Professor in the Chicago Post-graduate School of Gynæcology and Abdominal Surgery, on the Morphology of the Mesenterial Development of the Vertebrate Digestive Tract, an article giving the results of much research both on the human subject and on animals. 8. Dr. S. A. Francis Dixon, B.A., the Sensory Distribution of the Facial Nerve in Man. The facial nerve is here shown to consist of a motor and of an afferent portion; the latter part consists of the chorda tympani and the great superficial petrosal nerves; both these nerves are probably composed of taste fibres and are distributed to structures developed in connexion with the wall of the anterior portion of the pharynx. 9. An unsigned article on Poupart's Ligament, under the title of Archæologia Anatomica. 10. An article, also unsigned, entitled Anatomical Notes and Queries. 11. Professor Bertram Windle, D.Sc., M.D. Dub., supplies a report on Recent Teratological Literature. The last two articles are devoted to the Proceedings of the Anatomical Societies of America and Great Britain and Ireland.

Caledonian Medical Journal.—The April number completes the third volume of this journal. The principal article is on Pain in Visceral Disease, by Dr. J. S. Warrack of Aberdeen University. Dr. J. C. Simpson of Cambridge describes the cases of a husband and wife affected with lead-poisoning. The wife suffered severely from 1877 to 1893, the lead colic being diagnosed as obstruction from malignant disease, but she recovered perfectly under treatment. The well in the garden communicated with the house by a leaden pipe which was thickly encrusted.

Mercy and Truth.—Two of the contributions to the April number describe incidents of hospital work; one is by Dr. P. S. Sturrock of Baghdad, and the other by Mr. E. G. Horder of Pakhoi, South China.

Monist.—Professor Giuseppe Sergi of Rome argues in the April number that the primitive inhabitants of Europe were of three successive types. The original stock was of the Neanderthal species and this was succeeded by an immigration of a new type from Africa, which he therefore calls Eurafrican. In his classification he makes the colour of the skin quite secondary in comparison with the peculiarities of the skeleton and he recognises in the Eurafrican type three distinct races—namely, (1) African races such as the Abyssinians, not including negroes; (2) the Mediterranean race; and (3) the blonde type with blue eyes, known to-day as the Germanic. The Eurafrican type was succeeded by the Asiatic invasion which has been called "Indo-European" and was believed to be the bearer of civilisation.

Archives Générales de Médecine.—The original articles in the April number are on the Clinical Significance of Alimentary Glycosuria, by Dr. Linossier; on a case of Hypertrophic Ileo-cæcal Tuberculosis, by Dr. G. Caussade and Dr. Charrier; and the concluding portion of Dr. Leredde's articles on the Relation of the Nervous System to Diseases of the Skin.

New Inventions.

A PNEUMATIC PRESSURE-PREVENTING PAD FOR CYCLISTS.

THIS pad consists of two annular indiarubber air-cushions connected to one another by a flat indiarubber band containing a sort of pouch which can be filled with antiseptic wool. The external diameter of the larger cushion is about five inches and that of the other about three and a half inches; the central aperture of each is about one and a quarter inches. The connecting band is three and three-quarter inches long and about two inches wide. The air-cushions are not in communication with one another internally, but each has its own vulcanite tap and is inflated separately, so that the resistance can be regulated to individual requirements. The pad is primarily intended for female cyclists and is not attached to the saddle, but is worn beneath the clothing. It fits comfortably to the body, does not betray its presence by causing any fulness and does not inconvenience the wearer when walking. It can be washed if necessary and has a removeable covering made of any thin woollen material. The pad has received the name of "The Komphy," and it is claimed for it that it prevents the ill-effects of pressure on the perineum or from the saddle peak and makes the hardest of saddles comfortable. For women of middle age, and especially those who have lost flesh below the waist, this is no doubt of great importance. The pouch filled with wool is a valuable contrivance, giving support and protection just where it is most needed. The ordinary pattern has a waist-belt, to which it is fastened by broad tapes in front and behind, but those who for any reason object to the waistbelt can suspend the pad from a patent corset-attachment which screws into the corset. The price of the pad is 7*s.* 6*d.* and it may be obtained from Barclay and Sons, 95, Farringdon-street, E.C.

AN ARTIFICIAL MASTICATOR.

WITH Carrier's artificial masticator meat may be cut up on a plate as with an ordinary table knife. Very little practice is required in order to be able to manage it properly, and it does not in any way interfere with the usual table arrangements. It somewhat resembles a pair of strong hinged forceps or pliers; the points, however, are not flat but each of them is divided into three blades. The action, in fact, is that of a pair of six-bladed scissors. It is not apt to get out of order, does not require sharpening, can be readily taken to pieces for the purpose of cleansing, and can be easily carried in the pocket in a soft leather case with which it is provided. The total length of the masticator is seven inches. It has the advantage of not in any way impairing the flavour of the food and is intended specially for mincing the food of children and elderly persons. Messrs. Maw, Son, and Thompson, Aldersgate-street, E.C., are the sole agents for the United Kingdom.

THE LANCET.

LONDON: SATURDAY, APRIL 29, 1899.

THE MIDWIVES BILL OF THE BRITISH MEDICAL ASSOCIATION.

WE have been favoured with a copy of the Midwives Bill of the British Medical Association in its perfected form. The essential points of the Bill have been already given to the profession and, indeed, we have previously presented them with some comments to our readers.[1] It will not be amiss, however, again briefly to notice the principal provisions of the Bill as contrasted with those of the Midwives Bill now before Parliament—provisions which in the opinion of the Council of the British Medical Association justify them in putting forward a distinct measure of their own. Both Bills propose to give a licence to midwives authorising them to attend ordinary cases of labour; both provide a Central Midwives Board which has to frame regulations for the training and education of midwives; both provide that henceforth women practising as midwives for gain without a licence shall be liable to a fine; both provide that the licence or certificate enabling a woman to practise as a midwife shall be obtained locally from the local supervising authority of the district in which she intends to practice and shall be renewable annually; both provide that the local supervising authority shall exercise certain supervisory and disciplinary powers over the midwives of its district subject to the authority of the Midwives Board. Finally, both stipulate that the midwives' licence shall confer no medical status or title or any right to grant certificates of death or stillbirth or any medical certificate.

Such, speaking roughly, are the provisions in common of the two Bills. We now proceed to set out the chief points in the Bill of the British Medical Association which differentiate it from the Bill now before Parliament.

First, under the head of Licensing, the third section of the Bill provides not only that no woman shall be entitled to use the title of midwife or to habitually and for gain attend women in childbirth without a licence, but that the employment by a licensed midwife, as a substitute at any childbirth, of a person not licensed under the Act (that is, the employment of any unqualified assistant) shall be an offence punishable by a fine not exceeding £5. This is a very valuable and proper provision.

Secondly, the Bill of the Association has a very differently constituted Board from that of the Midwives Bill. The Parliamentary Bills Committee in their first efforts produced too unwieldy a Board. In this Bill the Board is delightfully small, consisting only of seven persons—six to be "selected" by the General Medical Council and one to be appointed by the Lord President of the Privy Council—all to be registered medical practitioners. The subtle compliment to the General Medical Council of giving it the duty of selecting six-sevenths of the board will doubtless be appreciated by that body, though it may be differently regarded by the advocates of direct representation. We approve of distributing the representation among the different districts of the country, though we scarcely see how the General Medical Council could pretend to know the fittest practitioners to be "selected" even if it had not repeatedly announced its unwillingness to do more than initiate the proceedings and generally to supervise the regulations of the board. Another point requiring reconsideration is the wisdom of allowing a term of only two years to the members of the board. We see that they are eligible for re-election, but two years is too short a time to give members a sense of interest or any education in their work.

Sub-section 6 of Section 6, dealing with the Board, enacts that no member of the Board shall act as teacher, instructor, or examiner of midwives, and no member of the Board shall, take any part in any inquiry respecting the conduct of any midwife to whom he or she has acted as teacher or instructor. This is rather hard on teachers and examiners and, it seems to us, may deprive the board of the services of many gentlemen who could give good help in such work. Much power is properly given to the local supervising authority, consisting of "not less than three registered medical practitioners, not teachers nor examiners of midwives." They are to be appointed by the county council of any administrative county or county borough and have power to suspend for misconduct, or for the prevention of the spread of infection, any midwife's certificate. The Bill of the British Medical Association omits one duty contemplated by the General Medical Council as devolving on the local supervising authority—namely, that "of making due provision whereby midwives may receive promptly the assistance of a registered medical practitioner in all cases of abnormality or difficulty as respects either the mother or child." Section 18 provides very properly for the control and supervision of lying-in homes kept by midwives and for the keeping of records of cases by them by providing that both the homes and the records should be open to inspection. The power of inspection is assigned to the Central Board. Should it not rather be given to the local supervising authority? It is sanguine to expect much supervision of such houses from a central board, whereas a supervising authority is on the spot.

Such are the chief points in this Bill of the British Medical Association. Some of them are obviously in the right direction and we should like to see them adopted. Others are a little doubtful. In any case we scarcely see the propriety of constructing a second and what must seem a rival Bill, and we think that the really important points of difference should be raised as amendments. There is ample time for considering this suggestion as it is fairly obvious that the chance of any legislation on the matter in the present year is very improbable.

AT the annual dinner of the Press Club on April 22nd Mr. CHAPLIN showed a great and natural anxiety to bring about a more sympathetic attitude on the part of the fourth estate to the Government vaccination policy—if, indeed, the word policy can be applied to the vacillating and drifting course which characterised the passage of last year's Bill

[1] THE LANCET, Feb. 18th, 1899.

through Parliament. Mr. CHAPLIN is rejoiced to find that there is evidence of a general increase in the amount of vaccination and that in some unions where the practice had been almost at a standstill a very substantial amount of infantile vaccination is now in progress. While the statement is too vague to be of much value we are not disposed to quarrel with the President of the Local Government Board in his natural satisfaction that infantile vaccination is not in such a terribly bad condition as before his Bill became law. At that time, it will be recollected, the infants undergoing vaccination were only about double the number of those remaining unvaccinated, so that even if at present one infant out of every four still escapes the protective operation Mr. CHAPLIN'S statement that there is a general increase in the practice is strictly correct. That the introduction of systematic domiciliary visitation and of glycerinated calf lymph would improve the position in places where the law had previously been a dead letter was only to be looked for and what was predicted is now taking place. Even in towns where anti-vaccination has been loudest and most boastful of its success all that was needed to show how large a part mere carelessness played in the matter was the introduction of a system by which the people would be visited in their own homes by the public vaccinator prepared there and then to vaccinate. Nor have we in THE LANCET assailed the Royal Commission on Vaccination for recommending that by modification of the law some attempt should be made to deprive anti-vaccination of the cheap notoriety and sham martyrdoms on which it has so profitably traded in the past. Last year's Bill had various defects which were pointed out in these columns, but what we have chiefly complained of is not that a conscience clause was accepted, but that it was unaccompanied by revaccination clauses. Mr. CHAPLIN himself was so far consistent that his Bill contained neither the one provision nor the other, but in a moment of panic, under the fear of defeat in a half-empty House of Commons, Mr. BALFOUR granted the former and failed to insist on the latter. The conscience clause, indeed, was not inserted by the Government as a matter of principle, but only as an expedient to prevent their opponents from snatching a victory in the voting lobbies.

When the Bill came before the Upper House the pressure was all the other way and the Lords threw out the conscience clause. After its re-insertion by the Commons defeat once more threatened Lord SALISBURY and once more something had to be done to prevent it. That something consisted in what was practically an announcement that if they (the Lords) would only let the Bill through they might expect to see revaccination legislated for by the Government in the next session—that is, in the session which is now more than half way spent. Just as a conscience clause was yielded to prevent defeat in the Lower House so revaccination was used for the same purpose in the Upper Chamber. There was this difference, however, that the conscience clause was a fact, while revaccination was no more than a promise couched in the usual guarded language. A few months ago we should hardly have called this a difference, excepting as a matter of time between one session and the other. Lord LISTER said: "However, as regards revaccination, the members of the Government who have been approached on the subject have given us good reason to hope that a Bill dealing with revaccination may be brought in next session. ..... The confident hope that the Government will see their way to take this course next session makes me the more readily acquiesce in what I confess is a tremendous experiment," and Lord HARRIS confirmed this by saying that "if the noble lord had not indicated that fact he had authority to state that the Government were prepared to consider during the recess whether it would not be possible to bring in such a Bill next session." Yet the session is more than half over, the Queen's Speech has made no reference to the matter, Lord SALISBURY and Lord HARRIS have both been dumb, and now Mr. CHAPLIN calls on the members of the Press Club to give every publicity to an important statement that he wishes to make regarding vaccination, and that statement turns out to be an absolute blank so far as concerns the promises in virtue of which the conscience clause was prevented from being a second time expunged from the Bill.

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The articles to which we have referred have undoubtedly added very considerably to our knowledge of this obscure condition, Dr. WHIPHAM'S analysis of symptoms more particularly being the most complete which has yet been published. The fact that so few cases are on record is probably due to the difficulty of diagnosis, but owing to these latest contributions it is to be hoped that further investigation will be made so that more precise knowledge of the etiology and pathology of the complaint may be secured.

DURING the present week the London Government Bill has been in Committee of the House of Commons. The question of including the City of London in the Bill has been discussed and decided in the negative. A proposal to instruct the Committee to deal with the Metropolitan Asylums Board has been ruled out of order and the House has considered the earlier clauses relating to the title of the new authorities and the areas of the proposed metropolitan boroughs. It is, we think, matter for much regret that while the attention of Parliament is being given to the vexed question of London Government the Bill makes no direct proposals for improving the health administration of the metropolis. The transference of powers from one authority to another may be wise, and we have, indeed, already expressed our sympathy with the view that the London County Council should be relieved of as much detail as possible. But mere transference will not in itself effect improvement in the administration of the duties transferred. No fault has ever been found with the Council's health administration which has, in fact, continuously grown in strength and efficiency. The transference of powers for which the Bill provides is intended to make the work of the borough councils more attractive and thus to add to the probability that persons endowed with a sound sense of good citizenship will seek election as members of the district councils. The proper corollary to this transference is the endowment of the County Council with powers which may properly be exercised by a body representative of the total population of London. This the

Bill makes no pretension to do, and unless it is amended in its passage through Parliament it is probable that London will remain for a number of years deprived of much of the useful service which its central health department could render. When the Local Government Act of 1888 was passed it was perhaps a wise course to leave the county health officer without duties which were very clearly defined. That there was ample work for such an officer no one familiar with health administration has doubted, but it has remained for the officers first appointed to show how their services may be best employed. In London the position shaped itself very quickly; the medical officer of health of the county had immediately important duties under the Housing of the Working Classes Act and these duties were in 1891 largely added to by the powers conferred upon the London County Council under the Public Health (London) Act. That the County Council has thus been able to render great services to London there is no possible doubt.

The question which needs consideration now is:—what should be the position of the County Council in the future in relation to the health administration of London? This, we think, should have been determined by the present Bill, but it gives no such indication of the intentions of the Government. Beyond providing the Council with an unsatisfactory method of exercising, when a sanitary authority is in default, certain powers, which it has itself hitherto exercised to the public advantage irrespectively of failure on the part of the sanitary authority, its position is practically the same as before. It is, however, possible to obtain some insight into the views of the Council on this matter and also into the views of its chief health officer; with regard to the former through amendments to the Bill of which notice has been given; with regard to the latter by a paper which has been prepared by the medical officer of health of London and which the County Council has printed. We may summarise the latter document by stating that it shows reason for linking together the several administrations of London in such a way as to create a really effective machine for the prevention of disease. Mr. SHIRLEY MURPHY has an easy task in showing the great disadvantage from which London suffers owing to the severance of the administrations for notification of infectious disease and for hospital provision from the administration of the central metropolitan health authority. For this we believe that there is only one remedy and that, as we have before stated, is that these two administrations should be combined. It is, indeed, difficult to explain why the Government have not recognised the necessity of this change and have not provided for it in their present Bill.

A further proposal is, we find, that the medical officers of health of London districts should be county officers and thus linked with the central as well as the district authorities. This question was much discussed in 1888 when the Local Government Bill of that year was before Parliament and the proposal received the approval of the Council of the Society of Medical Officers of Health and of the British Medical Association who, indeed, took active steps to secure its adoption. In this they were partially successful, for the Local Government Act does give opportunity for County Councils to appoint the medical officers of health of districts in other counties than London. The provision in this Act as it at present stands is, however, not adapted to London circumstances, and a more complete and satisfactory adjustment is needed to meet the special conditions of the metropolis. We should be glad to see some such course adopted, for we are satisfied that the more intimately the County Council is associated with the district health administration of London the more effective it will be. From the point of view of the district medical officer of health there is nothing to object to in this suggestion, for it would add to the dignity of his office and, we hope, to his influence with the district authority. Whether the subject will come in any precise form before Parliament we do not know, but in our view unless the Bill be amended in the sense we have indicated a fine opportunity for improving the health administration of the metropolis will be lost.

Annotations.

"Ne quid nimis."

THE PROGNOSIS OF COMPOUND FRACTURES.

BEFORE the days of antiseptic surgery cases of compound fracture of the limbs usually ended in a sacrifice of the limb, either primarily so as to prevent the risk of the patient being subjected to pyæmia, erysipelas, or prolonged suppuration or by a subsequent amputation. Since the use of antiseptics a limb is rarely removed by primary amputation unless the bones are so comminuted, the main vessels torn, or the tendons and muscular structures so damaged that repair is beyond consideration. This situation appears to us to offer certain unfortunate opportunities. If after a surgeon has done his best to save the limb an unfavourable union is the result he now runs the risk of being blamed for causing the very infirmities which he has done his best according to modern teaching and experience to avoid. It is to be regretted that medical men can be found to support such actions; if it were not for this these actions could not arise. Any surgeon of even limited experience knows how difficult it is to form an accurate prognosis in cases of compound fracture. In some cases the fragment can be readily got into favourable apposition and the outside wound can be easily cleaned while the destruction of the soft parts turns out to be not so great as at first appeared. Then, and perhaps aided by the patient's vitality and robust health, progress is favourable and very little deformity is left. On the other hand, the fracture may be comminuted and the bone split in a longitudinal direction, or the fracture may be oblique and the two ends impossible to get into apposition, while the patient's general health may be such that complications ensue even under the most intelligent treatment. As we have said, the prognosis in cases of compound fracture is uncertain. A faulty union may occur or much deformity may result from a superabundance of callus despite all precautions; then although the limb has been saved it may be nearly useless for a very long period or even permanently—a result which is all the more disappointing to the patient in that he has hoped so much from the conservative treatment. At the recent Manchester Assizes an action for damages was tried before Mr. Justice Bigham and a special jury. Mr. Richard Gunn, a surgeon of Droylsden, was sued by a man named Kite who had acted for him as groom. The groom was driving home when the horse stumbled and he was thrown out receiving a compound fracture of the right arm.

This was attended to by the house surgeon at Stockport Infirmary and he returned home the same night and was treated by Mr. Gunn. The limb would appear to have been examined at regular intervals but union apparently has not taken place. A want of bony union surely cannot be the fault of the surgeon but rather of the constitution of the patient. The plaintiff's case received medical support. For the defendant Mr. W. G. S. Nickerson, formerly assistant house surgeon at the Stockport Infirmary, now a lieutenant in the Royal Army Medical Corps at Portsmouth, stated that he put up Kite's fracture and that it was a badly splintered fracture. He stated that he got the bones straight, but that owing to the splinters the position of the shaft was unsatisfactory. He then formed the opinion that the fracture, which "was the worst fracture of the forearm he had ever seen," would have a bad result, either from the faulty union or excessive callus. Mr. W. Thorburn of Manchester said that with a fracture of this description, taking patients of average health, there was a considerable risk of incomplete union. He said that when he was a medical student the standard teaching was to amputate at once in such cases and he saw no evidence of negligence in what Mr. Gunn had done. He would not like to say that he could have done better. Mr. Walter Whitehead of Manchester gave similar testimony and said that the state of things which was shown in Kite's case was very likely to come about even with the best of treatment. The jury gave a verdict for the defendant without hearing his counsel, but his success in legally vindicating his professional character and ability is but a poor reparation for the anxiety and expense which he must have undergone.

THE SALE OF FOOD AND DRUGS BILL.

As will be seen from our Parliamentary intelligence in this issue the Standing Committee on Trade of the House of Commons began their work in earnest last week in regard to the consideration of the Sale of Food and Drugs Bill which was introduced by Mr. Long into the House of Commons six weeks ago. In view of the great number of amendments which several prominent Members have announced their intention of moving the labours of this Committee are not likely to be finished at a very early date. Already, however, certain important points have been considered and certain amendments have accordingly been ordered to stand as part of the Bill. The artificial colouring of margarine so as to imitate butter is not to be prohibited. The suggestion that the words "indelibly branded" should be inserted in Clause 1 before the words "margarine cheese" was withdrawn. Adulterated or impoverished cream is, however, proposed to be placed under the provisions of this clause although many other articles of food were apparently ignored, a point which was raised by Sir Charles Cameron, and Mr. Kearley. Our opinion, therefore, is confirmed—namely, that the Bill introduced by Mr. Long seems to be narrowing down the question to agricultural products without reference to the representations on the wider subject of food adulteration in general which were urged more than a year ago by the Select Committee. An important amendment, which we are glad to see was carried, was moved by Sir Charles Cameron to the effect that the Local Government Board should have power to act in the administration of certain matters within the province of the Sale of Food and Drugs Bill which decidedly have a bearing upon public health. But the most important announcement which Mr. Walter Long made in Committee was that relating to the use of boric acid and preservatives in food. He stated that scientific opinion was not opposed to the use of certain preservatives under certain restrictions. The question is one about which we have maintained again and again that some definite pronouncement from the Government was needed, so that we welcome the statement that the President of the Local Government Board has decided to appoint at once an expert committee to inquire into the whole question of preservatives, their use, and how far such use is injurious to health. It is impossible to deal adequately and *seriatim* with the issues raised in the proceedings of the Committee. We must postpone therefore a general criticism of the suggested amendments until they are embodied in the final report of the Committee which, as we have already said, may be expected to sit during a somewhat protracted time considering the contentious nature and the great number of the points with which they have to deal.

THE SERVICES OF THE GENERAL PRACTITIONER AND JURIES.

MR. EDWARD BALL, L.R.C.P. & S. Edin., L.F.P.S. Glasg., has had to vindicate in the Southport County-court his charges for attendance on the late Mr. Thomas Platt. The bill amounted to £53 9*s.* 6*d.* for medical and surgical attendance, medicine, &c. The attendance involved frequent visits, often in the night and at other inconvenient hours, also, it would seem, catheterism. For the latter operation the usual charge was 10*s.* 6*d.* Ordinarily Mr. Ball charged 3*s.* 6*d.* or 5*s.* for visits. But when, as was the case from August 3rd to September 7th, the case had become critical and required prolonged visits at all hours of the day and night he charged 7*s.* 6*d.* in the day time, 10*s.* 6*d.* between 8 and 11, and one guinea for visits in the night. He charged also for medicines. He insisted that the rent of the house—£28—had nothing to do with the matter, the patient being a man of means and without family. But the executors objected and compelled Mr. Ball to seek redress in the County-court. Dr. William Alexander of Liverpool and Dr. Percy Ashworth of Southport both thought the charges moderate. The jury granted the full amount claimed. And very rightly so. They appreciated the facts and gave a right verdict.

LAMP EXPLOSIONS IN MANCHESTER AND SALFORD.

AT a recent meeting of the committee of the Manchester and Salford Sanitary Association held on April 12th, Dr. Leech presiding, Mr. William Thomson, F.C.S., presented a complete report on the lamps which have exploded in Manchester and Salford and the oils used. He began about the end of 1895 to study the burners of the lamps in which explosions were said to have occurred. He was aided in this by the police who were allowed to take the burners to him. Towards the close of 1897 the Sanitary Association requested that samples of the oil used should be obtained, which was accomplished also with the aid of the police. Up to the present time 40 burners and 15 samples of the oil used with them have been examined. Of the burners 31 bore a particular trade-mark and "all the serious explosions he had investigated had been produced in lamps having glass reservoirs. The oil in such lamps would not reach such a high temperature as those in metal reservoirs, and the danger of thus obtaining the mixture of oil-vapour and air (41 volumes to 50) to cause the maximum of explosive violence would probably be greater than in metal lamps when the proportion of oil-vapour to air would probably be much greater." Mr. Thomson's conclusion is that under any condition the danger of explosions with metal reservoirs was "infinitely small" as compared with that from the use of glass or other fragile reservoirs. Of the 15 oils four were of the American low flash type and 11 were of the

Russian oil type, whilst not one was of the Scotch oil type having a flash point at or over 100° F. "In fact, not one came within about 11° of that standard." This seems paradoxical, but the reservoir when the low flash oil is used soon becomes charged with such an excess of oil-vapour that it ceases to be explosive as there is not enough air mixed with it. It appears that in Manchester and Salford more of the low flash point American oils have been sold than of the higher flash oils of Russian type, and the probabilities are that the latter are more than four times more dangerous as regards explosions, "as the conditions of temperature of the room and the lamp were such as to give more often the conditions necessary for producing a mixture of oil-vapour and air capable of producing the most violent explosions." If the lamp is upset or broken the danger of the oil catching fire is much greater with that of low flash point than with that where the flash point is higher and the flame spreads more rapidly, especially if the oil at the time of the accident is, as is usually the case, at a temperature considerably above that of the air. Mr. Thomson writes, "It had been suggested that the Government should take the usual plan of settling such matters by splitting the difference between the contending standards of 73° and 100° F.," but he thinks that 85° or 88° would be distinctly worse than 73°. Taking all the facts into consideration, both of danger from explosions in bad lamps and of danger from the upsetting and breaking of lamps, Mr. Thomson thinks the standard fixed for the flash point of petroleum oils should not be lower than 100° F. Whatever may be decided as to the flash point, it is much to be desired that the lamps should be made safer and that there should be some control over their sale, so that the public may be protected—for a large section of it needs protection—against dangerous lamps.

POOR RELIEF IN FRANCE.

A NEW bi-monthly periodical was issued in Paris in January this year under the editorship and management of M. Albin Rousselet, who is well known to the medical profession in France as the sub-editor of the *Progrès Médical*. It is entitled *L'Assistance Publique* and is devoted to all questions relating to poor relief. This is a matter of all the more importance as there is no Poor-law in France such as exists in England and therefore the submerged section of the population is in a more precarious position. This state of affairs is modified doubtless by a very recent law bearing the date of July 15th, 1893. The first clause of this law states: "All French subjects who are ill and possess no resources may receive gratuitously from the commune, the department, or the State"—answering to our parish, county, or State—"according to the relief district in which he lives, medical assistance." This it will be seen only applies to those who are suffering from some form of illness; the able-bodied pauper is not included in this law. But *L'Assistance Publique* points out that even among those who are ill, and very seriously ill, there is a large class of patients who cannot benefit from this enactment. The indigenous sufferers from phthisis, though possessing the triple qualification of being French subjects, of being ill, and poor, are not received in the hospitals. Practically they are outlawed. At best the phthisical patient is admitted into a hospital when he is at the point of death. This is done in the main to avoid the scandal of his dying in the public streets, but no real effort is made to save and to cure. The excuse given is that the hospitals have not the means of treating chronic diseases of this description and that there are not a sufficient number of beds to admit this class of patients. As matters now stand this is all true enough; but the fact remains that this particular class of patients cannot benefit from the law, though there is no moral reason for their exclusion. Of course, there are one or two notable exceptions due, however, to private charity. For instance, the hospitals of Ormesson and Villiers and the sanitary colonies of Noisy and Trémilly have treated 9514 children suffering from tuberculosis, giving a total of 326,859 days spent in these hospitals, and claim that 30 per cent. of the patients were cured. Nevertheless, there is no general and national system for the treatment of the poor whose poverty is aggravated by this very prevalent disease. This is one of the questions which this new periodical is bringing forward very prominently. Another question is the treatment of the trained hospital nurses, not merely with regard to the very meagre salaries which they receive, but with respect to the honours bestowed upon them. M. Rousselet points out that only two nurses, Mademoiselle Bottard of the Salpêtrière Hospital and Madame Brochard of the Tenon Hospital, have received the Cross of the Legion of Honour. The Minister of Commerce gives to those who have faithfully served the State for 30 years a medal of honour and the right to wear a tricolour ribbon. It is now claimed that hospital nurses, both male and female, who have an equally honourable and lengthy record of services rendered, should be entitled to the same honour. This proposal has received the support of Dr. Napias, the recently appointed Director of the Public Assistance in Paris, and perhaps in the course of time it will be definitely adopted by the Government. The interests of those members of the medical profession whose business it is to attend to the poor are also represented in the new periodical. It is urged that if the poor are to be properly treated the medical attendant must receive a reasonable remuneration, so that he may be able to afford the time necessary to do his duty in a satisfactory manner. Altogether, our new contemporary has a wide field of useful work before it and the appearance of this publication is the more appropriate as it will be the organ of a great international congress to be held next year in Paris for the purpose of discussing all the problems relating to the relief of the poor.

CHANGES IN THE SPINAL CORD IN PERNICIOUS ANÆMIA.

IN a recent number of the *Neurologisches Centralblatt* appears an abstract of an important paper published by Dr. Wilhelm Gobel in the *Mittheilungen aus den Hamburgischen Staatskrankenanstalten*. The writer had subjected to close examination the cords from six cases of pernicious anæmia, especially by means of Marchi's method. The first case was that of a woman, aged 63 years, who had had no spinal symptoms, and in her case the cord showed only very slight alteration in the anterior columns with no changes in the vessels. In the second case, that of a man, aged 51 years, in whom during life the knee-jerks were absent, there was visible partial degeneration of the extra-medullary posterior roots of the lumbar and lower dorsal cord. Examination by Nissl's method also showed cell changes in the cervical cord. The third case, that of a child, aged five years, showed no changes in the spinal cord. The fourth case, that of a man, aged 63 years, with loss of knee-jerks, showed microscopic changes in widespread asymmetrical alterations of the posterior columns, especially in the cervical region. There were also slight changes in the pyramidal tracts visible with the microscope and also alteration in the cells of the grey matter. The fifth case was that of a woman, aged 50 years, who had weakness of the legs, loss of knee-jerk, and weakness of the bladder. There were only slight alterations in the lumbar cord. In the cervical region there was symmetrical affection of the posterior

columns, the grey matter here and in the lumbar region being only slightly affected. The last case, that of a man, aged 27 years, showed a few scattered patches of change in the white substance unconnected with vascular changes. The ganglion cells in the cervical region were atrophic and deeply pigmented. Dr. Gobel thinks it unlikely that the alterations in the grey matter originate the changes in the white because when the affection is slight the former are often absent and they never seem to bear any true proportion to the latter. Nor does he think with Minnich and Nonne that the vascular affection determines the changes because when the changes in the spinal cord are greatest the changes in the vessels are frequently absent, and when the changes in the vessel are present there may be no degeneration. And it is not yet clear how great a rôle in spinal cord degenerations toxic substances play, these being carried presumably in the blood.

GARBAGE-MONGERS.

IN our issue of April 15th we recounted how an infamous person named Joseph Fells had received a sentence of four months' hard labour and 20 guineas costs for being in possession of a quantity of tinned food which was unfit for the food of man. He had previously been convicted at the County of London Sessions on March 24th for selling a quantity of tins full of bad condensed milk. What made the case particularly flagrant was that the tins had been purchased as bad by the prisoner. They had been pricked so as to do away with the "blowing," and then resoldered. On April 11th he was sentenced to six months' hard labour to date from the day of his conviction. Unfortunately this sentence runs almost concurrently with the other sentence of four months. The deputy-chairman is reported as saying that the punishment allowed by Act of Parliament for this kind of offence is totally inadequate. We quite agree with him. It cannot be too strongly insisted upon that persons who sell putrid food-stuffs are in reality potential murderers just as much as persons who send poisoned food by post, and whether their victims die or not they should be treated as anybody would be who deliberately administered arsenic or strychnia. Perhaps some day we may have a Bill embodying the above ideas, for the matter is far more important than the question whether margarine shall be blue or yellow.

"INFILTRATION ANÆSTHESIA" FOR SURGICAL PURPOSES.

IN a recent number of the *Archiv für Klinische Chirurgie* (September, 1898) Dr. H. Braun records the result of a careful investigation upon various local anæsthetics, part of which was pursued in conjunction with Dr. Heinze. Of local anæsthesia three kinds are distinguished. Thus the anæsthesia may be purely mechanical, or it may be partly mechanical and partly due to the paralysing influence of the material injected on the sensory nerves, or, finally, it may be a true regional anæsthesia due to the specific local action of the drug used upon the terminal nerve fibres. During the investigation Dr. Braun and Dr. Heinze experimented with a number of the more recently proposed anæsthetics, including guaiacol, aneson, orthoform, eucaine "A," as well as cocaine. Of these the majority were found to be more or less irritating and therefore unsuitable for "infiltration anæsthesia." Guaiacol in particular was very objectionable in this respect as well as in its being insoluble in water. Eucaine "A" was the only one which effected a practically useful local anæsthesia, though it seemed not quite equal to cocaine in its local anæsthetic effect or in the absence of irritation. Cocaine was next investigated and the strength of the weakest solution giving anæsthesia was ascertained. This was found to be 0·005 per cent., i.e., 1 in 20,000, or approximately one grain of the hydrochlorate to two pints of distilled water in English measure. Eucaine "B," a substance closely related to cocaine, was also found to have the same lower limit of effective action. The actual pain of the injection was masked by using a less weak solution, e.g., 0·04 per cent. solution of either of these drugs, i.e., one grain to five ounces of water. It was also found that stronger solutions of either of these drugs caused no local pain on injection. The intensity and duration of the local anæsthesia were the same for solutions of either drug of equal percentages; but the spread of the anæsthesia beyond the limits of the directly infiltrated area was somewhat slower with a 1 per cent. eucaine "B" solution than with one of cocaine. The order of efficiency was found to be as follows: first cocaine, second eucaine "B," third eucaine "A." The general conclusions are "that cocaine and eucaine "B" are the only two substances to be considered in the selection of a drug for infiltration anæsthesia; that they alone cause local sensory paralysis without irritation and without injury to the tissues and that they alone effect anæsthesia lasting enough for practical purposes even when injected in extremely dilute solution."

THE TAXATION OF SCIENCE.

THE Royal College of Surgeons of England has, as we announced last week, unsuccessfully appealed against the decision of the Court of Queen's Bench upon the subject of its liability to property duty in respect of part of the property held by it for the public objects of the institution. The result is not only surprising in itself but, as we venture to think, surprising also for the dialectic process by which it has been arrived at. Apart from the subtlety discovered by the Commissioners of Inland Revenue and now authenticated by the endorsement of two appellate tribunals the facts of the case are fairly simple. The College is a body incorporated by Royal Charter, its object being the "benefit of the common weal of this kingdom by the promotion of the art and science of surgery and the due promotion and encouragement of the study and practice of the said art and science of surgery." To the attainment of this object all its funds are legally appropriated and actually applied and that these are objects of a public nature and subserving the advancement of science not even the Inland Revenue Commissioners were prepared to dispute. It will strike most people as being something of an exegetical achievement that upon this state of the facts the courts should have succeeded in excluding the College from the benefits of an exception created by the Act of Parliament in favour of "any property legally appropriated and applied for ..... the promotion of science." That result, however, has been reached and by a reasoning process which distinguishes between the museum and the library in Lincoln's Inn and while it protects the museum as being devoted to the promotion of the science of surgery holds the library to ransom as dedicated to the private convenience or advantage of the members of the College. Into the refinements of the argument it would be both tedious and useless for us to enter, but we feel called upon to raise a vigorous protest against the process of refining by which the courts, as in this case, introduce uncertainty and confusion into the administration of the law and place the rights of litigants at the mercy of tribunals. Eight or nine years ago the question arose as to whether the Institution of Civil Engineers was, in circumstances almost precisely parallel to those of the Royal College of Surgeons at the present day, liable to the same duty. In the discussion of that case a great display was made of judicial acumen and distinctions were elaborated by which the Court of Appeal then, as now, laid very

stringent limitations upon the benefit conferred by the Act upon institutions formed for the promotion of science. One very distinguished judge thought that because a member of the institution made "a very good bargain for himself in becoming a member" that consideration ought to be decisive, and that the real object of the society, discernible underneath all its zeal for scientific advance, was the professional advancement of its members. Fortunately for the Institution of Civil Engineers the House of Lords was not captivated by this argument. Adopting a broad construction of the word "science" it held that applied science no less than the pure sciences fell within its meaning and sustained the claim of the institution to exemption in spite of the professional eminence and social success of its members. The Royal College of Surgeons is less fortunate in its present situation. As matters stand it holds part of its property for public purposes and the promotion of science on the museum footing and another part for private purposes and the enjoyment by its members of the amenities of life and various opportunities of professional advancement upon the library footing. This strikes us as being perilously near to judicial trifling and if it stood entirely alone it would be amusing in its way. But it is not pleasant enough to be thoroughly amusing to see the provision which Parliament has made for the encouragement of the pursuit of science frittered away by elaborate refinements such as these.

NUCLEUS FOR THE DIAPHRAGM.

IN a recent number of the *Journal Médical de Bruxelles* Fritz Sano gives first of all a short *résumé* of the literature dealing with this subject and especially of the work of Otto Kaiser who as a result of researches in comparative anatomy concluded that the nucleus for the diaphragm extends from the third to the fifth or sixth cervical segment, between the nuclei on the one hand of the muscles of the back and the nucleus accessorius on the other, and that the posterior median group of cells furnishes fibres to the phrenic nerve. Further, a case related by Collins seems to indicate that the nucleus of the phrenic in man lies in the lower part of the third cervical segment. The writer of this paper cut the phrenic nerve in a cat aged three months and examined the cord by Nissl's method. The result of the examination indicated that the phrenic nucleus occupies the central part of the anterior horn and reaches from the third to the middle of the sixth cervical segment. The cells of the sensory neurons which are in relation to the diaphragm lie in the spinal ganglia of the third to the sixth cervical nerves and the sympathetic fibres come from the middle and inferior cervical ganglia and in part also from the first thoracic ganglion.

SOME OBSCURE CASES OF FOOD POISONING.

A DANGER to which at times the community is exposed and for which in some instances it is difficult to suggest a remedy is well exemplified in some cases of food poisoning reported to the Local Government Board by the medical officer of health of the borough of Crewe. The *fons et origo mali* appears to have been in each instance pressed pigs' cheek which was obtained at a pork butcher's shop. There was nothing in regard to the taste and appearance of the cheek which could arouse suspicion and one consumer even stated that it "tasted splendid." Further, there is no reason for thinking that the other articles of food partaken with it, such as tea, milk, sugar, bread, mustard, and salt could have produced toxic symptoms. The symptoms were chiefly intense abdominal pain, retching, and purging. In some instances sleepiness was a marked symptom as was also dizziness. It is clear that a portion only of the food was infective, since but a few of those who partook of the food were poisoned in the manner indicated. Unfortunately it was impossible to secure any portion of the food or even any vomited matters or dejecta for examination. The cellar where the food was kept was apparently free from reproach, an inspection satisfying the medical officer of health that in this place there were no visible agencies of infection. The conclusion appears to be that ptomaines or the chemical products of bacterial action were the cause of the mischief. The case affords another lesson in connexion with our remarks last week on the steps which the Government should take to prevent meat extracts being made from filthy substances such as putrid livers and other offal.

MEDICAL PRACTICE AND SANITATION IN CUBA.

A CUBAN medical journal, *Archivos de la Policlínica*, complains that though in the time of the Spanish *régime* no person was allowed to practise medicine without a Havana diploma or a foreign one which had been confirmed by the local medical authority, yet since the Americans had taken possession of the island numbers of persons were known to be practising medicine whose claim to be qualified to do so had never been submitted to any examination. The *Archivos* thinks it very hard that this should be allowed to go on while Cuban medical graduates are not allowed to practise in foreign countries without undergoing examinations conducted in the language of the place. The chief of police has ordered the immediate closure of all brothels situated in hotels, taverns, or cafés. The *Archivos* expresses much gratification with the quantity, the quality, and, above all, with the promptitude of the relief distributed amongst the poor. Had time been wasted in inquiring about doubtful applicants many might have died. One consignment of relief stores mentioned consisted of 800 grammes of opium, 61,000 quinine pills, and 127,000 rations of bread. The American authorities have employed large numbers of persons in cleansing the streets of Havana which are at last beginning to look a little like those of a decent American town.

ACROMEGALY WITH SERIOUS MENTAL SYMPTOMS.

IN the current number of the *Journal of Mental Science* (April, 1899) Dr. David Blair of Lancaster County Asylum records a very interesting case. Since Pierre Marie (1886) noted it and gave an adequate description of this disease it has been universally recognised and, though a rare affection, more than 200 cases have been reported. The following case, besides being typical, has the additional interest of presenting mental symptoms which proved so serious that the patient ultimately became insane. A married woman, the mother of four children, had occasion to have some of her teeth extracted under nitrous oxide gas. One month later she began to exhibit delusions. She persistently complained of a gas pervading the house and suffocating her, and this she attributed to certain people who were believed by her to have caused it to enter her house. So much was she annoyed by the smell that she would constantly get out of bed at night to search for the source of the gas. She eventually became insane and was removed to the County Lunatic Asylum. There she continued to speak of the gas which she said she continually smelt on the premises. She would weep and groan at times, and cover her face with her apron to keep away the gas. She also suffered constantly from headache. The speech was slow, the pulse was 72, and the respirations were 16. Gradually it was noticed that her face became puffy, while the hands and feet grew large, soft, swollen, and spade-like in form, suggesting the appearance of myxœdema. There was a

general hypertrophy of the subcutaneous tissues, but the bones as revealed by a skiagram showed no enlargement. There was some hypertrophy of the nose and lower jaw, the alæ nasi being especially thickened, while the lips, particularly the lower one, also showed some hypertrophy. The tongue and tonsils were enlarged somewhat and the voice became guttural and metallic. The spine became kyphotic in the cervical region, the clavicles, ribs, and sternum were hypertrophied, there was lordosis of the lumbar spine with a pendulous abdomen, while the perspiration was profuse and of disagreeable odour. Her appetite was good and she would take more than an average quantity of nitrogenous food. The urine presented a persistent and excessive deposit of phosphates. The menstruation, which for some months had been irregular, now ceased and she developed lowness of spirits and irritability of temper. There was a constant feeling of lassitude and drowsiness and the original delusions regarding gas were gradually replaced by delusions regarding electricity. She felt pains all over her body like the pricking of needles and these she attributed to invisible enemies. Finally, she developed delusions of grandeur. Suspecting acromegaly the patient was put under treatment with pituitary extract. The first effect was a severe onset of metrorrhagia accompanied by hæmorrhage from the bowel. This passed off in a few days and she then began to improve physically and mentally. Her weight, which had increased before, now returned to a normal amount and menstruation returned and was maintained at regular intervals. The very prompt and favourable response to the administration of pituitary extract indicated that the treatment adopted was correct, and it was accordingly continued with evident benefit to the patient. The above case is the first one recorded in this country of what may be termed "acromegalic insanity," a condition comparable to myxœdematous insanity, in which thyroid treatment has been proved to be of benefit both physically and mentally. The success of the present case is so far encouraging as to indicate a similar mode of treatment for analogous cases in the future.

A FORM OF SPASMODIC PARAPLEGIA SECONDARY TO AN ORGANIC LESION AND WITHOUT DEGENERATION OF THE PYRAMIDAL TRACTS.

AT the meeting of the Société Médicale des Hôpitaux of March 24th M. Babinski read a paper on this form of paraplegia, of which he had observed three cases. There was no degeneration of the pyramidal tracts in any case. In one the lesion was a small sarcoma developed in the choroid plexus on the right side, and it compressed the medulla, pons, the middle peduncle of the cerebellum, and the cerebellum. Even near the tumour there was no degeneration of nerve fibres. The symptoms were headache, vertigo, optic neuritis, mental disorders, contracture of the upper limbs, with flexion of the fingers, and the form of paraplegia to be described. The tendon reflexes were not at any period exaggerated. In another case the upper dorsal spinal cord was compressed by a sarcoma of the dura mater. At this level there was marked sclerosis and the myelin of most of the fibres had disappeared, but above and below there was no trace of secondary degeneration. There were incontinence of urine and fæces, sacral bed-sores, epileptoid tremors, and that modification of the plantar reflex which M. Babinski has described as the "phenomenon of the toes."[1] In the third case there were a few patches of multilocular sclerosis of the cord. As in the preceding case the tendon reflexes were exaggerated and the "phenomenon of the toes" was observed. The first case showed that very intense contracture of the limbs of organic origin may exist without exaggeration of reflexes at any period and without epileptoid tremor, that an intracranial lesion may produce not only in the child but in the adult permanent spasmodic paraplegia without secondary degeneration of the pyramidal tracts, and that the contracture may attain an exceptional degree of intensity. The three cases showed very intense contracture of the lower limbs in the form of marked and permanent flexion of the thighs on the pelvis and of the legs on the thighs, accompanied by pains which occurred principally when an attempt to correct the vicious attitude was made and by spasms also most marked when this attempt was made. The contracture appeared to be due to irritation of the pyramidal system. M. Babinski concluded that not only was the form of spasmodic paraplegia independent of degeneration of the pyramidal tracts, but it indicated that these tracts were normal or at least but little altered.

[1] THE LANCET, Sept. 17th, 1898, p. 765.

THE LATE DR. JOSEPH O'DWYER.

A COMMITTEE of more than 40 physicians, representing 16 different medical societies of the city of New York and including representatives of both schools of medicine, has been formed for the purpose of doing honour to the memory of Dr. Joseph O'Dwyer. The first meeting was held at the New York Academy of Medicine on Nov. 22nd, 1898, under the chairmanship of Dr. J. D. Bryant and was mainly devoted to organisation. Dr. George F. Shrady was elected permanent chairman and Dr. Alfred Meyer permanent secretary, and the following committee on scope and plan were appointed: Dr. Dillon Brown (chairman), Dr. Robert Abbe, Dr. R. G. Freeman, Dr. L. Emmet Holt, and Dr. Louis Fischer. At the second meeting held at the Academy of Medicine on March 13th, 1899, the report of the committee on scope and plan was adopted and now only awaits final action of a meeting of the full committee. The memorial to Dr. O'Dwyer will probably take an educational form, for by the plan now outlined it is proposed to raise a fund of $30,000, the interest of which would support two O'Dwyer Fellowships in Pædiatrics open to competition by physicians who are graduates of the United States and to be held by the successful competitors for a period of two years. During that period they must furnish satisfactory proof of their engagement in original research work to a committee of five, one of whom shall be appointed by the President of Harvard University, one by the Dean of the Johns Hopkins Medical School, one by the Provost of the University of Pennsylvania, one by the President of the University of Chicago, and one by the President of the New York Academy of Medicine. Many details of this general plan are still to be arranged; the committee, however, are anxious that it should be known throughout the profession that a movement of this nature is on foot and that an effort will be made to give to it an international character.

PUBLIC HEALTH OF MALTA.

IN the report of the Public Health Department of Malta for the year 1898 it is estimated that on Jan. 1st, 1898, the population of the islands of Malta and Gozo was 159,993 and 20,330 respectively, making a total of 180,328. The number of births in the two islands in 1898 was 6932 and the number of deaths was 4648, so that the birth-rate was 38·4 per 1000 and the death-rate was 25·8 per 1000. The death-rate over five years per 1000 of the population at that age was only 14·3, but the death-rate below five years to 1000 living at that age was 108·3. The percentage of deaths under five years to total deaths was 51·3. Prefixed to the tables from which these figures are taken is the announcement that "in the following returns, stillborn, deaths on board ships and in the garrison are not included. The families of the military,

however, are included with the civil population." The general list of deaths comprises 18 from small-pox, 13 from measles, 85 from enteric fever, 36 from dysentery, 59 from Mediterranean fever, 477 from tubercle, 459 from cardiopathy, and 1217 from enteritis; of the deaths from enteritis 1030 occurred at ages under five years and 187 at ages over five years. Dr. S. Pisani, the chief Government medical officer, draws a gloomy picture of the infiltration of the subsoil with sewage in the suburban areas and urges the carrying out of drainage works. No fewer than 2097 persons, almost half the number deceased, were interred in churches, and hermetically-sealed zinc coffins are sometimes used. The highest shade temperature was 96·3° F. in June, the lowest being 41·4° in December. No rain fell during June, July, and August; the total for the remaining months was 29·18 inches. In the same report Dr. Tem. Zammit gives an account of laboratory work relative to the reaction of the serum of enteric fever and of Mediterranean (undulant) fever cases on the specific micro-organism of the respective diseases. Cases of Mediterranean fever of one week's duration gave the agglutinative reaction immediately; long standing or early cases gave the reaction after a few minutes.

A SECOND special meeting of the Chelsea Clinical Society to consider the Preventive Treatment of Tuberculosis was held at the Jenner Institute of Preventive Medicine on Tuesday evening last. Interesting papers were read and communications made by Dr. Theodore Williams, Dr. J. E. Squire, Dr. R. Maguire, Dr. S. H. Habershon, Dr. Rufenacht Walters and Sir C. Gage-Brown. We shall publish a report of the meeting in an early issue.

THE annual mess of volunteer medical officers organised by the Volunteer Medical Association will be held on Wednesday, May 10th, at Limmer's Hotel, under the presidency of Major-General Trotter, General Commanding the Home District. Further particulars can be obtained from the mess secretary, Surgeon-Lieutenant L. A. Bidwell, 59, Wimpole-street, Cavendish-square, W.

A COMPLAINT having been made to the Saxon Government by the husband of a woman who had died in the Dresden Clinic for Women that a necropsy had been performed on the body without his sanction the Minister of the Interior has ordered that in future no post-mortem examinations are to be made in hospitals without the express consent of the relatives.

THE thirty-first anniversary dinner in aid of the funds of the French Hospital and Dispensary is announced to take place at the Hotel Cecil on May 6th, when the chair will be taken by His Excellency the French Ambassador, supported by the Lord Mayor and the Sheriffs of London.

THE Baillie Lectures will be delivered in the large theatre of the St. George's Hospital Medical School on Thursdays, May 11th, 18th, and 25th, at 5 P.M., by Dr. W. Howship Dickinson, Baillie Lecturer for the year and consulting physician to the hospital.

THE chairman and members of the council of the Medical Graduates' College and Polyclinic will give a conversazione at the College, 22, Chenies-street, Gower-street, W.C., on the evening of Monday, May 1st, from 9 till 12.

H.R.H. THE PRINCE OF WALES has nominated the following as delegates on behalf of the National Association for the Prevention of Consumption and Other Forms of Tuberculosis to the Berlin Congress for the Prevention of Tuberculosis:—Sir Hermann Weber, Mr. Malcolm Morris, Dr. Hillier, and Mr. C. Rube.

AN International Congress of Veterinary Surgeons will be held at Baden-Baden on August 7th–12th inclusive. Particulars can be obtained from the general secretary, Dr. Casper, Baden-Baden.

SURGEON-GENERAL J. A. MARSTON, C.B., has been selected to fill the appointment of Honorary Surgeon to the Queen, vacant by the death of Deputy Inspector-General J. Jee, V.C., C.B.

THE annual dinner of old students of King's College, London, will be held at the Holborn Restaurant on Monday, June 26th. Dr. W. S. Playfair will take the chair.

THE Autumn Congress of the Sanitary Institute will be held this year in Southampton by invitation of the mayor and corporation, commencing on August 29th.

INAUGURATION OF THE LIVERPOOL SCHOOL OF TROPICAL DISEASES.

FOLLOWING closely upon the opening of the Thompson-Yates laboratories in University College, Liverpool, in October last by Lord Lister, it becomes our pleasing duty to record the inauguration on April 22nd of the new School of Tropical Diseases in Liverpool also by Lord Lister. The idea of the institution of schools in this country for instructing in tropical diseases medical men about to practise in the tropics advocated by Mr. Chamberlain some months ago was nowhere more eagerly taken up than in Liverpool. At the annual dinner of the Royal Southern Hospital on Nov. 12th, 1898, Mr. Alfred L. Jones, a prominent Liverpool citizen and West Africa merchant, made an offer of £350 a year to start a school in Liverpool for the study of tropical diseases. The offer was made in the presence of Professor Rubert Boyce of University College, Liverpool, and Dr. William Alexander of the Royal Southern Hospital. The president of the Royal Southern Hospital accepted the generous offer on condition that University College, Liverpool, and the Royal Southern Hospital should be united in the undertaking. This condition was cordially acquiesced in by Professor Glazebrook, the principal of the College. The great interest subsequently taken in the project by Mr. Alfred L. Jones, aided by the indomitable energy of Professor Boyce, resulted in subscriptions and donations coming in from all quarters towards the expenses of the proposed school. To those two gentlemen, warmly supported by the committee and medical staff of the Royal Southern Hospital, is due the establishment of the Liverpool School of Tropical Diseases. The management of the school is in the hands of a strong committee, of which Mr. Alfred L. Jones is the chairman and Mr. William Adamson (president of the Royal Southern Hospital) the vice-chairman. The committee also consists of duly appointed representatives of University College, Liverpool, the Royal Southern Hospital, the Liverpool Chamber of Commerce, the Steamship Owners' Association, and the Shipowners' Association. A sum of over £1700 has already been promised, partly in annual subscriptions and partly in donations, in support of the school, which promises to be of great value to all interested in tropical countries, either in trade or otherwise. A large floor in the Royal Southern Hospital has been set apart for tropical cases. This floor includes a cheerful ward containing 12 beds, now fully occupied, also an extensive laboratory for the examination of blood, urine, fæces, &c., and furnished with the apparatus applicable to modern research. Dr. Rubert Boyce, the professor of pathology in University College, Liverpool, will superintend the pathological department of the school, with Dr. Annett as pathological demonstrator. The committee have been fortunate in securing the services of Major Ronald Ross,

Indian Medical Service, as special lecturer on tropical diseases. Major Ross's lectures will be illustrated by lantern slides and diagrams with reference to the cases in the tropical diseases ward. Dr. Annett will devote his whole time to the subject of pathology and will teach both in the ward laboratory and in the Thompson-Yates laboratory in University College. Four courses of lectures of two months each will be delivered to qualified men each year. The number of malarial cases treated in Liverpool in 1898 amounted to 294. In the previous year, as noted in THE LANCET of March 18th, there were 242 cases of malaria, 14 of beri-beri, 30 of dysentery, and 39 of tropical anæmia. With the means of instruction in the varied forms of tropical diseases thus afforded there ought to be no need for Liverpool students to proceed to London to obtain that which is ready to hand at their own doors. It may be safe to say that if the new school in Liverpool maintains the energy which has characterised its initiation the requisite recognition by the Colonial Office can only be a matter of a very short space of time. At least the London School of Tropical Diseases cannot claim priority of foundation.

The proceedings of the inauguration commenced by the opening of the new ward in the Royal Southern Hospital, to be called the "Samuel Henry Thompson Ward" (after the father of the donor of the Thompson-Yates Laboratories). Amongst those present, in addition to Lord Lister (who performed the opening ceremony), were Sir Richard Thorne, K.C.B., Sir Charles Cameron (Dublin), Sir Christopher Nixon, Sir Bosdin Leech, Sir James C. Browne, Dr. Church (the President of the Royal College of Physicians of London), Dr. J. W. Moore (the President of the Royal College of Physicians of Ireland), the Lord Mayor of Liverpool, Mr. Alfred L. Jones (the Chairman of the Liverpool School of Tropical Diseases), Major Ross, Indian Medical Service, Professor Michael Foster, &c.

Mr. ADAMSON (the president of the Royal Southern Hospital) in requesting Lord Lister to declare the Samuel Henry Thompson Ward to be now set apart, in connexion with the newly established Liverpool School, for the treatment of special cases of tropical diseases, drew attention to the fact that this was no new move on the part of the committee of the hospital, for since the foundation of the hospital 57 years ago the wards had never been free from tropical maladies and it was an interesting fact that during the last few years 460 cases had been under treatment in these wards. In 1877 19 cases of malaria were brought to the hospital in one day. The proximity of the hospital to the docks was the chief reason for the patients being carried thither. The ward which his lordship had just opened was full. The occupants of the beds, 12 in number, represented the following nationalities—viz., China, India, the United States, Norway, Sweden, Russia, Finland, England, and Ireland. The tropical diseases from which the patients were suffering had been contracted in Java, India, Brazil, Savannah, South Carolina, Sierra Leone, Forcados, Old Calabar, Benin, and Cape Coast Castle. They also hoped to train nurses who would go abroad, provided not only with a certificate of competency as fully qualified nurses, but who had under the medical staff of the hospital acquired a special knowledge of tropical diseases. It was also hoped to train negresses as nurses.

Lord LISTER, in declaring the ward open, felt sure that Liverpool was doing in this matter what was of the greatest importance for the welfare of mankind. It might have been supposed by some people that the treatment of tropical diseases in Liverpool was a somewhat fictitious matter and that patients were got together for the purpose of the school and for nothing else, but they now learnt that patients with tropical diseases had for a long time past been treated in that hospital. At the same time it was to the advantage of those patients that there should be a distinct tropical diseases school. In direct proportion as any hospital or hospital ward had associated with it a school in which diseases were earnestly studied in all their bearings and under the critical eye of observers was the welfare of the patients. People sometimes had the notion that a hospital with a medical school attached was not so good for the patients as a hospital which had no medical school. There could be no more ridiculous mistake. Lord Lister said that he could not avoid saying that the committee of the Liverpool School of Tropical Diseases were to be congratulated on having obtained the services of so distinguished a man in that particular class of diseases as Major Ross. That gentleman's observations had been of the highest importance and every week or two they saw evidence and confirmation of the efficacy of his work, the recognition of which came from Germany, France, and other countries. His lordship also congratulated the school on having Professor Boyce as the head of the pathological department.

THE INAUGURAL DINNER.

The day's proceedings were followed by the inaugural banquet which was presided over by Mr. Alfred L. Jones (the chairman of the school), with Lord Lister on his right as the guest of the evening and the Lord Mayor of Liverpool on his left. Amongst the other guests were Dr. Church (President of the Royal College of Physicians of London), Professor Michael Foster (President-elect of the British Association), Dr. J. W. Moore (President of the Royal College of Physicians of Ireland), Sir Richard Thorne, K.C.B. (Principal Medical Officer to the Local Government Board), Sir William Broadbent, Bart., His Excellency F. M. Hodgson, C.M.G. (Governor of the Gold Coast), Sir C. Nixon, Sir J. Crichton Browne, Sir C. Cameron, Sir Bosdin Leech, Sir Raylton Dixon, Sir J. S. Willox, M.P., Sir E. Russell, Mr. W. F. Lawrence, M.P., Mr. A. F. Warr, Mr. C. McArthur, M.P., the President of the Manchester Chamber of Commerce, Professor Clifford Allbutt (Regius Professor of Physic, Cambridge University), Dr. Patrick Manson, Dr. Waldemar Haffkine, C.I.E., Mr. W. Adamson (vice-chairman of the Liverpool School of Tropical Diseases), Principal Glazebrook, Professor Boyce, Professor Paterson, Professor Carter, Dr. Alexander, Dr. Adam, Mr. J. W. Hughes, Mr. Charles W. Jones, Mr. Charles Booth, jun., Mr. J. O. Strafford, Colonel Goffey, Mr. J. Chadwick, and Mr. A. H. Milne (honorary secretary), representing the committee of the school, the town clerk, the head constable, Dr. E. W. Hope (the medical officer of health of Liverpool), the general manager and secretary of the Mersey Docks and Harbour Board, the secretary of the Chamber of Commerce, the Presidents of the Cotton, Timber, General Brokers, West India and African Associations, the President of the Liverpool Consular Association (the Consul-General for Brazil), the secretary (the Consul for Uruguay) and the treasurer (the Belgian Consul) of the same, the Consul of the United States of America, the Consuls-General for Chili, Belgium, France, Mexico, and Italy, the Consuls of Costa Rica, Denmark, Norway, Sweden, Switzerland, and Venezuela, Professor Sims Woodhead, Professor S. Martin, Mr. Pye-Smith, Dr. Leech, Dr. Rose Bradford, Major Ross, I.M.S. (Lecturer on Tropical Diseases to the Liverpool School), Mr. R. Brocklebank, Mr. Walter Holland, Mr. R. D. Holt, Mr. A. Garnett, Mr. E. K. Muspratt, Mr. W. J. Davey, Mr. W. B. Bowring, Colonel Nicholson, Major Herbert, Mr. John Rankin, Mr. Alfred Booth, Mr. W. Killick, Mr. L. S. Cohen, Mr. R. T. Clarke, Dr. H. O. Forbes, Mr. Mitchell Banks, Dr. Macfie Campbell, Mr. R. Jones, Dr. Cameron, Mr. Puzey, Dr. Barr, Mr. Damer Harrisson, Mr. W. Bolton, Mr. G. R. Wilson, Mr. H. J. Ward, Mr. John Holt, Mr. G. R. Sandbach, Mr. J. Handaside Dick, Mr. J. B. Hutton, Mr. J. Walkden, Mr. G. H. Paterson, Mr. H. Cottrell, Mr. A. T. Crawford, Mr. E. H. Harrison, Mr. A. McNicol, Captain Voules, Mr. E. H. Cookson, Mr. L. Cappel, Dr. Macalister, Mr. Newbolt, Dr. Berry, Dr. Barendt, Mr. Holland, Dr. H. Jones, Dr. Baker, Dr. Owen, Dr. Morris, Dr. Archdall, the Editor of the *Journal of Commerce*, the Editor of the *Shipping Telegraph*, Mr. R. P. Haddon, Dr. Hill, Dr. Warrington, Dr. Mott, Dr. Steeves, Mr. J. Houlding, Mr. F. Willis, Dr. Nisbet, Mr. A. Maxwell, Dr. Bernard, Mr. J. Tunnicliffe, Mr. C. Killick, Mr. G. Hamilton, Dr. R. Hamilton, Dr. Davidson, Dr. Grünbaum, Professor Raleigh, Professor Sherrington, Professor Lodge, Professor Herdman, Dr. Caton, Dr. Glynn, Mr. J. Stewart, Mr. A. T. Squarey, Mr. W. D. Hughes, Mr. G. T. Addis, Mr. W. P. Hartley, Mr. J. Pickering, Dr. Roberts, Dr. Clarke, Mr. W. Dalton, Dr. Abram, Mr. Bickersteth, Dr. Permewan, Dr. Bushby, Dr. Marsden, Dr. Manby, Dr. Annett, Dr. Rider, Dr. Grossman, Dr. Thomas, Dr. Williams, Captain Graham, Mr. James, Mr. R. Williams, Mr. David Jones, Dr. Lee, Dr. Bradshaw, Dr. Richardson, Dr. Hayward, Mr. G. W. Neville, Dr. Moore, Mr. C. McIver, Mr. A. T. Crawford, and others.

After the loyal toasts had been duly honoured the

CHAIRMAN proposed "The Study of Tropical Diseases" and said that he often wondered why Liverpool had not sooner taken up the study of tropical diseases scientifically. He felt that the present effort was worthy of all England and there was a feature connected with it which was most pleasing. That was the assistance which they had received from other countries. Germany, Holland, and Belgium had sent liberal contributions. The speaker paid a high tribute to the Royal Southern Hospital and to Professor Boyce for their public spirit.

Lord LISTER, who responded to the toast, said that he was fully convinced of the great importance of making a special study of tropical diseases. The medical student in the ordinary hospital had rare opportunities of seeing these diseases and for a man who was about to practise in the tropics it was essential that he should have opportunities of studying them here before embarking on his tropical career. In Liverpool they had a supply of tropical diseases second to none in the British Isles. He had been over the laboratories in which these investigations were to be conducted and they seemed to him to be eminently satisfactory. He had also seen the syllabus of the course of instruction. Such being the case he sympathised with them deeply in feeling that it was somewhat of a hardship if men who had studied in Liverpool under the best conceivable conditions that could exist in the British Isles had nevertheless to go to London. He felt so strongly in the matter that he took the opportunity of seeking an interview with Mr. Chamberlain on the subject. He found that Mr. Chamberlain cordially sympathised with them in their efforts; and in the second place he learned from him that the arrangement proposed was made for only one single year and he commissioned him to say to them that when that year had expired he would reconsider the question. He (Lord Lister) hoped that the time would come when they would be in coöperation with the London School of Tropical Diseases which had his heartiest sympathy.

Dr. J. W. MOORE (the President of the Royal College of Physicians of Ireland) also responded to the toast and said that it was a strange thing that in studying diseases familiar to their own country they sometimes omitted to study those prevailing in tropical or sub-tropical climates. One disease particularly before his mind was typhus fever which had always been regarded as peculiar to sub-Arctic climates and especially to Irish populations. As far as Ireland was concerned it was rapidly becoming the extinct dodo of medicine, but he was astonished to read in the last volume of the "Twentieth Century Practice" an elaborate article on typhus fever written by a Mexican, based on his practical experience of the disease in Mexico. He congratulated Liverpool upon the establishment of the laboratories which they had had the privilege of inspecting and upon that special ward in the Royal Southern Hospital. The Lord Mayor proposed "The Liverpool School of Tropical Diseases" which was responded to by Dr. William Carter and Professor Boyce. Dr. Church (the President of the Royal College of Physicians of London) replied to the toast of "The Medical Profession" in a polished speech. Professor Foster (President-elect of the British Association) also acknowledged the toast in a speech brimful of humour. The toast of "Our Guests" was replied to by the Governor of the Gold Coast and Mr. W. F. Lawrence, M.P. The proceedings of the day reflected much credit upon Liverpool and marked a red-letter day in its annals.

PLAGUE IN BOMBAY.[1]

(Concluded from p. 1116.)

IN accordance with the reports of former epidemics and the experience of the Austrian Commissioners we are led to assume as an unquestionable fact that in both forms of the plague—the bubonic and the pneumonic—the initial infection is a local one and that it remains so. The primary infection (through the skin) is the cause of the bubonic disease and of the development of plague metastases. But if in every such case we must assume a primary local and then a locally fixed source of continuous infection we must admit the existence of a primary bubo in every stage of the disease, even if the evidence thereof cannot be made out with absolute certainty either clinically or anatomically. Dr. Müller (p. 209) says that in his experience post-mortem examination has shown considerable glandular swellings which have entirely escaped detection during life. We must conclude, therefore, that a primary bubo may exist for days before evidencing pain or swelling. It is even conceivable that the course of the symptoms may remain entirely localised, although clinically we find that even in mild cases a general infection of the system may exist, proved by a subsequent appearance of a bubo, carbuncle, enlargement of the spleen, and subcutaneous hæmorrhage.[2] The prognosis depends upon the capability of resistance of the organism, especially of the circulatory and nervous centres, against the poison in the blood.

Clinically it is impossible to establish any difference in the type of the plague. Being a disease of one nature (*einheitlich*), only the symptoms under which it manifests itself may be differentiated, since they depend upon an aggregate of influences, such as the natural resistance of the organism, the virulence and quantity of the poison to be overcome, and the manner in which it found its entrance into the system. A correct differentiation can be based only upon the way in which the disease invaded the organism, and on this principle we distinguish the glandular-bubonic and the pneumonic plague.

The Commissioners during their stay at the height of the epidemic in Bombay did not have sufficient opportunities to come to a conclusion regarding the period of incubation; they adduce, therefore, the opinion of other observers, especially that of Dr. Choksy (p. 214), chief medical officer of the Arthur-road Hospital, who lays it down at from three to six days, in exceptional cases below, in others above, that time, extending even to 12 days.

Two doors are known at present as to the entrance of plague poison into the human system—namely, the *integument*, including the mucous membrane of the mouth, the nasal and the pharyngeal cavities, on the one hand, and the *respiratory* apparatus on the other. From the consideration of these conditions follow the individual prophylactic measures. The commonplace advice to avoid all contact with the person of the plague-stricken or with his expectoration and other excreta will not be accepted by those whose duty it is to be busy about the sufferer or by those who are linked by blood-relationship. Generally speaking, we should avoid all drawbacks lowering the vitality of the organism and excesses of all sorts, observe general hygienic principles, laying the chief importance upon a most scrupulous attention to the skin and disinfecting those parts of the body which come in contact with the patient or his excreta. The prophylactic measures, therefore, in the bubonic plague are those generally observed in all infectious diseases. Dr. Müller adds: "I bathed three times at least daily, chiefly on account of the heat; any injuries to the skin I covered with sticking-plaster; the other measures as to clothing and diet which play an important part in ancient treatises on the plague we took no notice of."

Dr. Müller is unable to give data regarding age, employment, &c., of the patients suffering from plague. This much, however, he states, that the most critical age of infection may be put down at between the ages of 20 and 30 years. He had five cases between 10 and 15 years, 13 between 15 and 20 years, 12 between 30 and 40 years, three of 50 years, and one of 60 years of age. The youngest patient was an infant a few months old, extremely emaciated, the child of a Hindoo opium-eater. She had the typical bubo, of the size of a hazel nut, in the right groin. The child recovered. The official report for 1896–97 gives much information on this subject.

Owing to hygienic precautions the medical staff of the hospitals escaped with one exception, that of Dr. P. N. Davda (a Jain); none of the sweepers and wardboys died, although they had to poultice and dress the incised buboes. The same freedom was observed among the numerous

[1] Über die Beulenpest in Bombay im Jahre 1897. Gesammtbericht der von der Kaiserlichen Akademie der Wissenschaften in Wien, zum Studium der Beulenpest nach Indien entsendeten Commission. Theile I. und II. A. Mit 5 Lichtdrucken und 36 Curventafeln. In Commission bei Carl Gerold's Sohn, Buchhändler der Kaiserlichen Akademie der Wissenschaften. Wien. 1898. (On the Bubonic Plague of Bombay in 1897. A Joint Report of the Commissioners sent to India by the Imperial Academy of Sciences of Vienna to Study the Bubonic Plague. Parts I. and II. A. Vienna: Carl Gerold's Son. 1898.)

[2] See hæmorrhagic cases: p. 45 of "Dhondi Sadu," and p. 63 of "Gopall Laximon," and others.

relatives who for days sometimes crouched about the patient's bed. Dr. Müller could not detect liability to bubonic infection in consequence of injuries and abrasions of the skin in persons coming in contact with plague patients with their filthy clothing. He suffered from accidental deep punctured wounds on the fingers from split bamboos of which the hospital beds were made, and from swollen hands from mosquito bites, without taking any precaution beyond washing with solution of sublimate. As to the stethoscope, he discarded it after a few days and performed auscultation with the bare ear without using special disinfection.

There is a general consensus of opinion that the mortality from bubonic plague exceeds that of all other infectious diseases. In the official report of the Arthur-road Hospital we find it put down at 73·26 per cent. inclusive of all admissions; Hindoos at 75·46 per cent.; native Christians at 67·24 per cent.; and Mussulmans at 66·38 per cent. The mortality of men was put down at 73·24 per cent., of women at 75·73 per cent., and of children at 66·66 per cent.

The known high percentage of deaths leads to an unfavourable prognosis. There can be no doubt that the prognosis depends upon two conditions—namely, the sum total of natural resistance of the organism and the virulence of the infection. Dr. Müller noticed that a soft pulse not exceeding from 130 to 140 and respiration not higher than from 30 to 40 may be looked upon as favourable. Late appearance of buboes is an unfavourable sign, especially those on the neck near the angle of the lower jaw; whether those of the axilla are more fatal than those of the iliac region could not be decided. It is questionable whether the appearance of carbuncles is a favourable sign; subcutaneous hæmorrhage proved the reverse; sweats are symptoms of approaching death; plague bacilli in the blood are a most unfavourable symptom. (See the record on the Blood in Section 3, the Anatomical part of the report.)

In typical cases the diagnosis is easy; in atypical it is very difficult, even impossible; in doubtful cases bacteriological examinations alone, yielding positive results, can decide the question. In cases presenting pneumonia when enlargement of the spleen is present the suspicion is considerable that the infection is present; an examination of the sputa and of the blood will establish a certainty.

The Commissioners abstained from interfering in any way with the treatment. Iodine injections per rectum were frequent. Alcohol was objected to by the patients. In some cases primary buboes were injected with iodine, carbolic acid, creolin, and sublimate and other mercurial preparations. Dr. Müller saw no good result from the treatment. Buboes containing pus were opened; the ward-boys applied poultices and dressings to them. Surgical treatment by extirpation of the primary bubo should be early resorted to. Supposing that the favourable course of the disease depends upon the heart's action an early administration of digitalis, strophanthus, and large doses of alcohol would, in Dr. Müller's opinion, be appropriate. Administration of calomel and iodine enemata he considers useless. Measures producing diaphoresis, on which the old literature on the plague insists, might be tried. Owing to a tendency to hypostasis of the lungs cool baths would be justifiable. Regarding methods employed by Haffkine, Yersin, and Lustig, mention is made in the Anatomical part (Section 3) of the report. At page 42 there is the case of Custodio Francisco Ribeero, treated with Yersin's serum, fully described by Dr. Müller, ending fatally.

We cannot part from Dr. H. F. Müller's masterly report without expressing our deep sorrow at the loss of a rarely gifted young professional brother, to whose accomplished qualifications every page of his clinical report is a witness. In it he leaves us as his legacy faithful sketches of the forms of the dire disease to which he fell a victim when attending on Franz Barisch, a servant in the Institute of Pathological Anatomy in Vienna, where Dr. H. Albrecht and Dr. Ghon were completing the bacteriological examination of specimens which they brought with them from Bombay.

The following is the complete history of Dr. H. F. Müller's fatal illness compiled by Dr. Rudolf Pöch. It is highly instructive. On Oct. 15th Barisch showed symptoms of pneumonia; from the result of Dr. Anton Ghon's and Dr. H. Albrecht's examination of the sputa, considering also his employment in the laboratory, suspicion arose that his was a case of poisoning by plague bacilli. Dr. Müller who was sent for to examine Barisch caused him to be placed in an isolation room at the General Hospital, taking all necessary precautions there. At the same time disinfection was practised in Barisch's lodgings under the superintendence of Dr. Ghon. Although Dr. Müller was unable to establish a positive diagnosis at first, he took every precaution by placing the patient in an isolation room and strongly warned the two nurses to use the greatest care whilst on duty. He bestowed every attention upon the patient and did not hesitate to examine him repeatedly. It was whilst performing a dangerous and self-sacrificing service that he undoubtedly obtained the seeds of the disease. On Oct. 18th—that is, on the fourth day—Barisch died from plague pneumonia. The diagnosis was completely confirmed on bacteriological as well as on clinical evidence. On Oct. 20th one of the nurses undergoing isolation became feverish. On this account both she and her companion were transferred into the "observation room" of the Franz Joseph Hospital, to which Dr. Müller himself migrated, volunteering his services for the treatment of the patient. On his arrival at the hospital Dr. Müller was apparently still quite well, but the same evening he was chilly; notwithstanding that the room was very well warmed he walked about shivering and rubbing his hands. He complained of great depression and pain in the back; he coughed without expectorating and attributed his being unwell to physical over-exertion and to having caught cold. On the Sister of Mercy in attendance he made the impression of suffering from fever. She asked him to take his temperature, but Dr. Müller did not do so. During the night he slept soundly. On Oct. 21st Dr. Müller paid a visit to Barisch's two nurses. He looked very pale, complained of great weakness, and laid down at nine o'clock in the forenoon "to take more rest." His pulse was 110; he coughed much without expectoration. About noon he got up, but shortly afterwards was obliged to go to bed again. His temperature, taken for the first time, stood at 38·2° C. The first expectoration now made its appearance; it was reddish and thin. Dr. Kretz examined the sputum and found a large number of plague bacilli. Notwithstanding the attempt to conceal from him the result of the bacteriological examination, from the clinical condition of his illness he established a clear diagnosis of plague pneumonia and stuck to that conviction. His pulse which was small and elastic rose to 120 at 2 P.M. His temperature by 6 P.M. reached 40° C. There was no wandering. Alcohol in abundance was administered and 0·6 grain of digitalis was given in infusion. He was very thirsty and asked for Biliner water to drink. He positively declined to have an injection of plague serum. In the afternoon he had two loose, not bloody, yellow-brown stools. He slept a good deal during the night and awoke a few times; he was somewhat delirious, but soon fell asleep again. On the 22nd in the morning the conjunctiva was very red. He was unconscious, fits of noisy delirium set in, and speech was mostly indistinct. There were short but frequent paroxysms of coughing followed by large quantities of reddish thin sputa. On this day Dr. Müller took no solid food. A second dose of digitalis was given as well as abundant (*reichlich*) quantities of alcohol. In the afternoon he complained of pleuritic pains in the chest and asked for morphia. Of the prescribed dose he hardly took one-third, the pains having subsided in the meanwhile. At 6 P.M. respiration was very hurried (59 per minute) and cyanosis set in. Cough was increasing in frequency; his breathing was short and stertorous; there was abundant blood-stained expectoration. There was no hæmorrhage of the skin and no bubonic enlargement was evident. In the course of the afternoon four thin bloodless stools were passed accompanied by pain. Consciousness was failing. When the thermometer was applied the patient was roused from his drowsy state and began to count his pulse and respiration. In so doing he made repeated mistakes and began counting again until he arrived at a result. At 10 P.M. the temperature fell to 37·8° C. and for awhile consciousness became clearer, followed by great restlessness and delirium. On Oct. 23rd at 1 A.M. the patient got up and with assistance walked twice up and down his room; he returned to bed and slept; later he awoke once more and passed urine. There was no unconscious passing of stools or of urine. At 4 A.M. the temperature stood at 38° C. His breathing was difficult and cyanosis was increasing. After 4.15 stertorous respiration set in and large quantities of fluid ran from the mouth; at 4.30 he expired. Dr. Müller was only 32 years of age.

THE ROYAL ACADEMY.

THE one hundred and thirty-first exhibition of the Royal Academy opens to the public on May 1st. What strikes us most about this year's exhibition is the complete sameness of the subjects which artists choose for the exercise of their talents, and this failing is especially noticeable in some of the landscape painters. On the whole, we think the exhibition is not so good as that of last year. Mr. Sargent has no masterpiece like the Wertheimer portraits of 1898, the President is represented only by one portrait, Mr. Swan has deserted pictures for sculpture, and there are no less than three enormous views of the scene outside St. Paul's Cathedral on the occasion of the Diamond Jubilee. Of the portraits we will first take those which will interest our readers specially as being those of medical or scientific men. Mr. Orchardson leads the way with a portrait of Lord Kelvin, and a very good one too. Mr. Sant exhibits a presentation portrait of the late Mr. Henry Lee, F.R.C.S. (who, by the way, is described in the catalogue as M.R.C.S.), and Mr. Frederick Goodall has a picture of Mr. Henry E. Juler, F.R.C.S. Among other portraits of well-known people and others are a masterly one of Mr. Gerald Balfour by Mr. Watts; of Dr. Gregory, the Dean of St. Paul's, by Sir W. B. Richmond; of Mrs. Charles Hunter by Mr. Sargent, who also sends an admirable picture of Miss Octavia Hill. As good a picture as any is Mr. W. Llewellyn's portrait of Mrs. Herbert Fuller.

To come to pictures not portraits, 115, "Allotment Gardens," by Mr. George Clausen, is sure to receive the attention which it is worth. Another Associate, Mr. La Thangue, sends four pictures, all good, and one more than good—namely, 319, "Harrowing." Mr. Edwin A. Abbey has two works, neither of which are so striking as the King Lear of last year, although 289, "O Mistress Mine, Where are you Roaming?" is quite worthy of the artist's well-deserved reputation.

Mr. George Boughton's "Wintry Spring" (342) is very charming and delicate. Of pictures by outside contributors we think 461, "The Tambour Frame," by Mr. Melton Fisher, is the most remarkable. Mr. Fisher always manages his textures both of drapery and flesh without apparently the slightest trouble, and the result is a most restful and refined one. Of the work of a master in a different style—Mr. Albert Goodwin—everyone should look at 258, "The Street of Mansoul"; 923, "Indian Afterglow," and a water-colour (1100), "Amsteg, St. Gothard." Among other pictures in the water-colour room are two beautiful landscapes by Mr. Leopold Rivers, 1126, "A Sussex Valley," and 1096, "On the Sussex Coast." Mr. Thorne Waite's "England's White Cliffs" (1165) is good. The sculpture department is this year particularly noticeable, and we note with especial commendation two little statuettes by Mr. Swan (1924 and 1927), the first being a leopard lying down and eating and the other a leopard running. To the latter might well be applied a slight variation of the old epigram upon the Greek statue:—

> "See that Bacchante, see, though formed in stone
> She's gained the threshold! Stop her, or she's gone."

The lithe, sinuous, and yet rapid motion is marvellously expressed.

Mr. A. Drummond's "The Gods of the Ancients" is a curious example of a good picture spoiled by a slip in detail. The scene is a classical city, possibly ancient Rome in the second or third century. Various Roman ladies are looking at images of gods, Egyptian and others. One lady regards a crucifix with astonishment—and may well do so, for it must have been made at the earliest in the thirteenth century.

The Misses Casella are represented by some of their clever wax medallions and various exhibitors show enamels, among which we may specially mention those by Mr. Alexander Fisher, Mr. Léon Solon, and Mr. and Mrs. Nelson Dawson. Mr. Herkomer's enormous shield with enamel pictures (2016) is unpleasing as a whole.

Mr. Goscombe John, whose singularly clever statue "The Elf" we praised last year and which we were delighted to see again this year, has another charming work (2052) "Joyance," a model for a bronze fountain. Of the exhibition as a whole we should say that the sculpture is above the average, as are the water-colours, but that the oils are not so with the exception of a few.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

River Tyne Port Sanitary District.—During 1898 41 vessels were visited by Dr. W. E. Harker on account of reported or suspected sickness on board, and we note that 58 cases of diarrhœa or choleraic diarrhœa had occurred while vessels were at sea. There were, too, 10 cases of yellow fever on vessels coming from South America. As regards emigrants 485 passed through the port during 1898, all being apparently bound for America. There were inspected in a sanitary sense no less than 15,602 vessels, the total number of visits paid being 16,043. Out of the whole number inspected 1668 were found to be dirty and 378 had structural defects. During the prevalence of small-pox at Middlesbrough and Bilbao all arrivals were medically inspected, a special officer being appointed for night duty.

Eastbourne Urban District.—One of the four sources of water-supply to this town has now been abandoned owing to the fact that through over-pumping the salinity of the water markedly increased. Eastbourne now possesses three isolation establishments, a general hospital for infectious disease, a shelter for persons whose houses are being disinfected or who themselves have been exposed to infection, and a small-pox hospital.

Wigan Urban District.—The voluntary notification of measles is in force in Wigan, but Mr. William Berry, the medical officer of health, is of opinion that the notification of the first case in a household has not been of use in preventing the spread of the disease. Enteric fever is "more or less endemic in Wigan" and Mr. Berry is inclined to regard this endemicity as due to previous pollution of soil. It will, he thinks, in spite of the much-improved sewerage system, "take years to get rid of the bacillus of enteric fever from the soil." Wigan is about to draw a supply of water from Thirlmere, the corporation having arranged with Manchester for such a supply.

Maidstone Urban District.—Mr. Matthew Adams reports that during 1898 the whole of Maidstone, with the exception of Barming Heath, was supplied with water from sources other than Farleigh, and on commenting upon the water from the four sources of supply now in use he points out that there is no absolute test for the purity of a given water, each water "being a law unto itself as regards purity." Numerous analyses have been made of the several waters of Maidstone during 1898, and these Mr. Adams has used for establishing as it were a sort of standard of the normal characteristics of each water. Of the waters now in use that from Boarley "appears to be a most excellent water," that from Cossington is "evidently subject to surface influence," and that from Ewell is a "steady good greensand water," but the nitrates and phosphoric acid are regarded by Mr. Adams as "habitually too high." The mid-Kent water, which is also derived from the greensand, had but one "blemish" and that was a frequent turbidity from iron oxide. As regards quantity the company have, Mr. Adams states, had some difficulty in maintaining a full supply and an intermittent service had at times to be resorted to. In the matter of isolation accommodation the district council have determined to materially enlarge their hospital.

Manchester Port District.—Dr. J. H. Crocker, the medical officer of health of this district, is to be congratulated upon the complete report which he has made with reference to the year 1898. The district is an important one, embracing as it does the Manchester Ship Canal, the rivers Mersey and Irwell above Ince Ferry and Dungeon Point, and the river Weaver up to Frodsham Bridge. There abut upon the Ship Canal as many as 13 sanitary districts. During 1898 there were inspected in different parts of this extensive district some 1346 vessels, the majority being visited at Manchester or Salford. A considerable number of cattle ships arrive in the waters of the port from Montreal, and the port sanitary inspector has hence been made an inspector under the Diseases of Animals Acts (1894 and 1896). Dr. Crocker deals very promptly with any cases of infectious disease introduced into the port and as an instance that of the s.s. *Kotka* which entered the canal with a case of small-pox on board may be mentioned. The case was notified to the medical officer of health by telephone and instructions were given that

no one save the medical officer of health was to board or leave the vessel on the journey up the canal. In the meantime the medical officer of health succeeded in vaccinating everyone on board, and on arrival at Salford the patient was removed to hospital. The general arrangements in this port as regards notification and the transmission of messages seem to be very complete, but it is to be feared that the staff must at times be overworked.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In 33 of the largest English towns 7297 births and 3993 deaths were registered during the week ending April 22nd. The annual rate of mortality in these towns, which had declined from 23·1 to 19·5 per 1000 in the three preceding weeks, further fell last week to 18·3. In London the rate was 17·2 per 1000, while it averaged 19·1 in the 32 provincial towns. The lowest rates in these towns were 11·8 in Cardiff, 12·9 in Burnley, 13·1 in Swansea, and 13·4 in Norwich; the highest rates were 22·0 in Brighton, 22·4 in Manchester, 22·6 in Newcastle-upon-Tyne, and 23·4 in Liverpool. The 3993 deaths included 384 which were referred to the principal zymotic diseases, against 379 in each of the two preceding weeks; of these, 120 resulted from measles, 107 from whooping-cough, 64 from diphtheria, 42 from diarrhœa, 31 from "fever" (principally enteric), 20 from measles, and not one from small-pox. No death from any of these diseases was recorded last week in Halifax; in the other towns they caused the lowest death-rates in Plymouth, Swansea, Huddersfield, and Gateshead; and the highest rates in West Ham, Birkenhead, Manchester, and Blackburn. The greatest mortality from measles occurred in West Ham, Bolton, Manchester, and Salford; from whooping-cough in Birkenhead and Oldham; and from "fever" in Birkenhead. The mortality from scarlet fever showed no marked excess in any of the large towns. The 64 deaths from diphtheria included 29 in London, five in Sheffield, four in Leeds, four in Blackburn, four in West Ham, three in Liverpool, and three in Portsmouth. No fatal case of small-pox was registered during the week under notice either in London or in any other of the 33 large towns, and three cases of small-pox were under treatment in the Metropolitan Asylum Hospitals on April 22nd. The number of scarlet fever patients in these hospitals and in the London Fever Hospital at the end of last week was 2144, against numbers declining from 2584 to 2126 on the seven preceding Saturdays; 189 new cases were admitted during the week, against 167, 150, and 163 in the three preceding weeks. The deaths referred to diseases of the respiratory organs in London, which had been 470 and 343 in the two preceding weeks, further declined last week to 277, and were 94 below the average. The causes of 64, or 1·5 per cent., of the deaths in the 33 towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Nottingham, Leeds, Newcastle-upon-Tyne, and in nine other smaller towns; the largest proportions of uncertified deaths were registered in West Ham, Birmingham, Blackburn, and Halifax.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had declined in the three preceding weeks from 23·3 to 19·3 per 1000, further fell to 18·1 during the week ending April 22nd, and was slightly below the mean rate during the same period in the 33 large English towns. The rates in the eight Scotch towns ranged from 10·2 in Perth and 12·1 in Leith to 21·3 in Greenock and 21·9 in Dundee. The 554 deaths in these towns included 20 which were referred to measles, 13 to whooping-cough, eight to diarrhœa, five to "fever," four to scarlet fever, and three to diphtheria. In all, 53 deaths resulted from these principal zymotic diseases, against 79 and 54 in the two preceding weeks. These 53 deaths were equal to an annual rate of 1·8 per 1000, which corresponded with the mean rate last week from the same diseases in the 33 large English towns. The fatal cases of measles, which had declined from 25 to 13 in the three preceding weeks, rose again to 20 last week, of which 11 occurred in Glasgow, six in Aberdeen, and three in Edinburgh. The 13 deaths from whooping-cough showed a slight further decline from recent weekly numbers, and included six in Glasgow, two in Dundee, and two in Greenock. The five deaths referred to different forms of "fever" corresponded with the number recorded in the preceding week, and were all registered in Glasgow. The fatal cases of scarlet fever, which had been three and seven in the two preceding weeks, declined to four last week, of which two occurred in Glasgow, where two of the three deaths from diphtheria were also recorded. The deaths referred to diseases of the respiratory organs in these towns, which had been 144 and 136 in the two preceding weeks, further declined to 119 last week, and were 33 below the number in the corresponding period of last year. The causes of 38, or nearly 7 per cent., of the deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had increased in the three preceding weeks from 31·6 to 33·4 per 1000, declined to 30·1 during the week ending April 22nd. During the past four weeks the rate of mortality in the city has averaged 32·0 per 1000, the rate during the same period being 19·7 in London and 18·9 in Edinburgh. The 202 deaths registered in Dublin showed a decline of 22 from the number in the preceding week, and included 10 which were referred to the principal zymotic diseases, against 15 and 10 in the two preceding weeks; of these, three resulted from whooping-cough, two from "fever," two from diphtheria, two from diarrhœa, one from scarlet fever, and not one either from small-pox or measles. These 10 deaths were equal to an annual rate of 1·5 per 1000, the zymotic death-rate during the same period being 1·7 in London and 1·2 in Edinburgh. The fatal cases of whooping-cough, which had been five and four in the two preceding weeks, further declined to three last week. The two deaths from diphtheria corresponded with the number recorded in the preceding week. The deaths referred to different forms of "fever," which had been five and four in the two preceding weeks, further fell to two last week. The 202 deaths in Dublin last week included 38 of infants under one year of age and 59 of persons aged upwards of 60 years; the deaths of infants showed a slight further increase, while those of elderly persons showed a further decline from the numbers recorded in recent weeks. Eight inquest cases and four deaths from violence were registered; and 71, or more than a third, of the deaths occurred in public institutions. The causes of 12, or nearly 6 per cent., of the deaths in the city last week were not certified.

THE SERVICES.

ROYAL NAVY MEDICAL SERVICE.

THE following appointments are notified:—Fleet Surgeon W. E. Bennett to the *Crescent*. Staff Surgeon J. W. O. Underhill to the *Tribune*. Surgeons: E. A. Penfold and J. Boyan to the *Crescent;* and W. H. Daw to the *Antelope*.

ROYAL ARMY MEDICAL CORPS.

Lieutenant-Colonel Ernest H. Fenn, C.I.E., is seconded for service on the Staff. Captain James A. Murison resigns his commission.

Major E. O. Wight has been granted leave to England on private affairs to Oct. 21st. Captain Hughes holds himself in readiness to embark for Bombay.

INDIA AND THE INDIAN MEDICAL SERVICES.

To be Surgeon-General: Colonel Lionel Dixon Spencer, C.B., Bengal Establishment. Surgeon-Lieutenant-Colonels to be Brigade-Surgeon-Lieutenant-Colonels:—*Bengal Establishment:* Daniel Nicholas Martin, Russick Lall Dutt, Joshua Duke, John McConaghey, and Edward Palmer. Lieutenants to be Captains:—*Bengal Establishment:* Archer William Ross Cochrane, William Wesley Clemesha, James Alexander Black, Roger Parker Wilson, Victor Edward Hugh Lindesay, James Currie Robertson, Norman Robinson Jones Rainier, Christopher Dering Dawes, and Edmund Ludlow Perry. *Madras Establishment:* Michael Biddulph Pinchard, William James Niblock, Clarence Barrymore Harrison, Nicholas Purcell O'Gorman Lalor, Thomas Henry Symons and Ernest Reinhold Rost. *Bombay Establishment:* Chintaman Ramchandra Bakhle and Krishnaji Vishnoo Kukday. *Retirements:* Colonel Daniel O'Connell Raye, Bengal Establishment; Lieutenant-Colonel Robert Andrew King Holmes,

Bengal Establishment; and Lieutenant-Colonel William Henry Thornhill, Madras Establishment.—*London Gazette.*

Majors to be Lieutenant-Colonels:—*Bengal Establishment:* Francis Frederick Perry, Stephen Little, George Hart Desmond Gimlette, Christian Bernard Hunter, and Julian Carter Carington Smith. *Madras Establishment:* William Frederick Thomas, Henry George Luther Wortabet, Edulji Palanji Franchman, Richard James, Sarkies Carrapiet Sarkies, and David Stuart Erskine Bain. Captains to be Majors:—*Bengal Establishment:* William Henry Wilson Elliot, William Ronaldson Clark, George Frederick William Braide, Robert John Marks, Charles Edward Sunder, Malcolm Albert Ker, Andrew Buchanan, Lewis Gordon Fischer, William Vost, John Garvie, Clarence Edwin Lloyd Gilbert, Courtenay Clarke Manifold, and Gerard Beatty Irvine. *Madras Establishment:* Frederick James Crawford, David Simpson, Robert Robertson, and Thomas Charles Moore. *Bombay Establishment:* Charles Hardwick Louw Meyer, Letterstedt Frederick Childe, Herbert Herbert, and Thomas David Mollis Barry.

ARMY MEDICAL RESERVE OF OFFICERS.

Surgeon-Captain J. Cameron to be Surgeon-Major.

VOLUNTEER CORPS.

Artillery: 2nd Cinque Ports (Eastern Division Royal Artillery): Surgeon-Lieutenant H. Marshall resigns his commission. 2nd Devonshire (Western Division, Royal Artillery): Surgeon-Captain A. K. Crossfield to be Surgeon-Major. *Rifle:* 2nd Middlesex: Surgeon-Lieutenant H. W. Syers to be Surgeon-Captain.

VOLUNTEER INFANTRY BRIGADE.

Cheshire: Surgeon-Lieutenant-Colonel A. Hamilton, 2nd Volunteer Battalion the Cheshire Regiment, to be Brigade-Surgeon-Lieutenant-Colonel, on appointment as Senior Medical Officer to the Brigade.

ALDERSHOT.

The question of milk-supply in connexion with the sewage farm at Aldershot raised quite a sharp discussion in the House of Commons last week when the consideration of the Army Estimates was resumed. The matter was obviously not a very suitable one for discussion by a Committee of Supply on the Estimates. As we understand, no order has yet been issued sanctioning the sale of milk from the dairy of the sewage farm in question. The civilian inhabitants of the district have raised a strong opposition against this being done and several of the members of the House are apparently opposed to the sale of milk from any sewage farm. The Aldershot sewage farm was, it will be remembered, some years ago when under a different management to that at present, in a very unsatisfactory condition—little better, in fact, than a sewage swamp; but it is alleged to be now in a very different state and to have been for some time working very satisfactorily. Whether this be so or not can only be determined, of course, by careful inspection and inquiry into all the facts. There is no evidence, however, that the crops of a sewage farm are unwholesome or that the dairy produce of well-managed sewage farms gives rise to disease. Mr. Powell Williams in citing the case of Birmingham, might easily have added a list of other places where milk has been supplied from dairies in connexion with sewage farms to the residents in their neighbourhood. It all depends upon the adequacy and efficiency of the arrangements, the care that is exercised in the management of the farm, and the proper inspection of the cattle and everybody employed on it to see that they are healthy and free from disease. The Government advisers and the medical officers at Aldershot fail to see any reasonable ground, it is said, for prohibiting the sale of the dairy produce at Aldershot. Mr. Powell Williams having already promised that a special expert inquiry is to be made into the matter and that the War Office will be guided by the result of that inquiry we do not see that much remains to be said in the meantime.

THE PHILIPPINE WAR.

There has been some sharp fighting of late in the Philippines and the American troops have had to encounter a good deal of hardship in their marches owing to the difficult nature of the country, in addition to the casualties they have sustained in capturing the entrenched positions held by the insurgents. The heat is great and we read of men dying from sunstroke. There is necessarily a good deal of disease incidental to campaigning under such conditions—principally fever, diarrhœa, and dysentery The rainy season has begun and there must be a suspension of active hostilities during its continuance. This is only what might have been expected in the event of the insurgents refusing to come to terms and being bent on continued resistance. It will be interesting to watch the effect which recent events will have upon political opinion in America and upon the course of action of the Government of that country. If Aguinaldo's army has been disastrously defeated at the attack and capture of Calumpit and reinforcements are arriving so as to enable the Americans promptly to follow up their victory we may hope that the neck of the rebellion will soon be broken.

RED CROSS DECORATION FOR NURSES.

The Queen has conferred the Decoration of the Royal Red Cross upon the under-mentioned nurses:—Miss Catherine Sarah Mowbray, late Indian Nursing Service, Miss Mary Ellen Barker, Indian Nursing Service, and Miss Theresa McGrath, in recognition of the services rendered by them in connexion with the nursing of the sick and wounded during the late operations on the Punjab Frontier; Miss Sarah Lucy Wilshaw and Miss Mary Ellen Harper, both of the Army Nursing Service, also receive the decoration in recognition of their services in tending the sick and wounded in Egypt in connexion with the recent operations in the Soudan.

A BRITISH CENTRAL COMMITTEE OF THE RED CROSS SOCIETY.

With the view of keeping the Red Cross Society more in touch with the regular army in times of peace, so that in times of war the medical services may know exactly the amount, nature, and condition of the aid available from voluntary sources, a Central British Red Cross Committee has been formed and has now been recognised by the Secretary of State for War as the official channel through which offers of voluntary aid in time of war will be accepted by the War Office. The committee are at present holding their meetings in the board-room of the medical division of the War Office, 18, Victoria-street, Westminster. Lord Wantage has been appointed chairman and Major W. G. Macpherson, Royal Army Medical Corps, secretary.

THE VOLUNTEER AMBULANCE SCHOOL OF INSTRUCTION COMPETITION.

The Volunteer Ambulance School of Instruction competition for the Hamilton Challenge Bowl, which has been held for some years by the 24th Middlesex (Post Office Rifles) has been decided. Anatomy, First Aid, and Drill were the three subjects, and teams from a number of Volunteer regiments competed. The Challenge Bowl was won by the team from the 1st Cadet Battalion the King's Royal Rifle Corps. The corps, which has a large and very smart ambulance section, is in want of a Medical Officer. The Commanding Officer's address is 2, Finsbury-square.

LORD KITCHENER'S RIDE THROUGH THE EASTERN SOUDAN.

Lord Kitchener has arrived at Berber after a camel ride of 800 miles through the Eastern Soudan. He found the people thankful for their release from all the sufferings which they had undergone under Dervish rule. Everything points to the country settling down under the new conditions and to the gradual return to a peaceful and contented life on the part of the sheiks and different tribes.

VOLUNTEER MEDICAL OFFICERS' DINNER.

The annual mess of the Volunteer Medical Officers will be held on Wednesday, May 10th, at Limmer's Hotel, under the presidency of Major Trotter, General Commanding the Home District. Those desirous of attending should send in their names to Surgeon-Lieutenant L. A. Bidwell, 59, Wimpole-street, Cavendish-square, W.

THE QUEEN'S BIRTHDAY.

It is announced that the Queen's Birthday will be celebrated in London alone on Saturday, June 3rd next, and at all other stations, naval and military, on Wednesday, May 24th next.

In recent Army orders issued from the War Office at Cairo the Sirdar expresses his regret at the retirement from the Egyptian Army of Colonel Gallwey, C.B., R.A.M.C., and after detailing the services rendered by that officer wishes him, on behalf of the Army, every success in his future career.

Surgeon-General J. A. Marston, M.D. St. And., C.B., has been selected to fill the appointment of Honorary Surgeon to the Queen, vacant by the death of Deputy-Inspector-General J. Jee, V.C., C.B.

Correspondence.

"Audi alteram partem."

OÖPHORECTOMY AND THYROID EXTRACT IN RECURRENT MAMMARY CANCER.

To the Editors of THE LANCET.

SIRS,—Dr. Herman's account of his very successful treatment of a case of recurrent cancer of the breast by oöphorectomy *plus* thyroid extract will, I hope, draw attention strongly to this most interesting subject. To my mind one of the most important points about this case is the fact that previously to the oöphorectomy menstruation had been irregular for six months and nothing had been seen for three months. If the patient (aged 49 years) had not reached the menopause she was evidently on the verge of it. My case, No. 3 in the *British Medical Journal* of Feb. 4th, 1899, was 49 years of age and had seen nothing for six months. No benefit followed the oöphorectomy, but she was bed-ridden with many visceral and osseous growths and I ventured to think that failure in this case did not prove that oöphorectomy after the menopause was valueless in cancer mammæ. Dr. Herman's present and to a less extent his former case tend to support this view. But we have still to determine when the influence of the ovaries on cancer ceases. Wonderful as the disappearance of cancer was in this instance I was sorry to be unable to agree with Dr. Herman, when he exhibited the patient at the Medical Society, that all cancer had disappeared but not without leaving traces. I should fear that the traces left, particularly the "keloid-like nodules" and slight plaques in the skin around the healed ulcer, are cancer. That these are not growing and ulcerating does not to my mind prove that they are not cancerous and will not ultimately behave as cancer usually does. We have all been learning lately that cancer may lie dormant for many years. I hope Dr. Herman may prove right; but I think it is early to feel that if his two cases continue taking thyroid they have "a sure prospect of freedom from cancer."

This brings me to the question of the part which thyroid plays in producing disappearance of cancer such as the above. The question is interesting from the scientific point of view and important from the practical, for thyroid has not appeared to me to be a drug borne as well as peppermint water and it is of some moment not to add unnecessarily to the sufferings of these patients.

Now the facts are not quite as Dr. Herman states them. In the paper above alluded to I tabulated seven cases of my own treated by oöphorectomy only (at least until its effect seemed exhausted). One of these cases (No. 1) shows to my mind less evidence of existing cancer than Dr. Herman's present case and a large amount of cancer was present when the oöphorectomy was done. My argument is that if oöphorectomy alone effected the disappearance in this case, it may have been the real agent in instances where thyroid was given in addition. In my case, No. 2 again, nothing could have been more satisfactory than the rapid and all but complete removal of the numerous cancer nodules—after oöphorectomy only; but they soon recurred. Was that because thyroid had not been given? It was given then, at all events, 20 grains per diem, the patient being at her best, much better than at the time of operation, and not having "developed new ovaries." The most obvious result was the speedy loss of 5 lb. Besides my own seven cases I collected eight others, *in all of which thyroid was given* in addition to the oöphorectomy; in three (not six) of these information was very scanty. But they, like No. 1* and No. 2*, were Dr. Beatson's own cases. He stated at the Gynæcological Society that in them he had obtained no result or a very transient one; he was speaking of the treatment of breast cancer by oöphorectomy plus thyroid, the method which he himself introduced; so, until Dr. Beatson corrects me, I feel I may assume that all were treated as Dr. Herman would wish.

Mr. Cheyne states in his original account—and I repeat his statement in the first line of my remarks on thyroid treatment—that his two patients (No. 3* and No. 4*) were given thyroid, but Dr. Herman classes them with mine. No. 5* is Dr. Herman's first case. We have then eight or, adding Dr. Herman's second case, nine cases (not four) treated by oöphorectomy plus thyroid. In three out of nine (not three out of four) the cancer disappeared more or less completely. The first of them (Dr. Beatson's) became ill about two and a half years after the oöphorectomy—I believe of intra-thoracic trouble, but I cannot at the moment find Dr. Beatson's recent note. We may hope that recurrence is not at the bottom of the mischief, but there must be good reason to fear that it is. Dr. Herman's first case remains well 25 months after the operation and his second nine months after. The other six cases were disappointing failures. Perhaps thyroid was not steadily persisted in throughout all these cases, but it was given at first and would doubtless have been continued had it seemed to do good.

Dr. Herman fairly states Page and Bishop's case when he says that "a cure followed the administration of thyroid extract." My criticism (*loc. cit.*) on it was that the case did not read like one of cure from the steadily increasing action of a drug; and I suggested at the Medical Society that the disappearance of cancer in this instance might be on all fours with that remarkable case shown by Pearce Gould at the Clinical Society at the end of 1896 (and to be shown again by him next Friday evening) in which no treatment at all was employed, with a result as good as has yet been attained by oöphorectomy.

With regard to the cases in which I gave thyroid, three had undergone oöphorectomy and two were long past the menopause—a state which may be very different from the former. I cannot help feeling that out of the five some convincing evidence of the action of thyroid should have been obtained, for, as Dr. Herman reminds us, the patient could not "develop new ovaries." I venture to think from the above analysis that the evidence in favour of thyroid is not at present strong. I would add that at the present stage simple arithmetical calculations will not help us much towards the solution of questions such as Dr. Herman raises. Each case, its treatment and result, must be carefully analysed and compared with others. In my list of seven will be found two extremely bad cases (No. 3 and No. 7); two post-menopausic, one of them 64 with practically no ovaries. These were in a sense "exploratory" operations done to ascertain the scope of the operation, the patients understanding the real state of matters. Finally, in No. 5 and No. 6 it was difficult, for reasons stated, to estimate the value of the oöphorectomy, so I kept them in a separate class. If well considered I believe that such facts as we have before us support (not establish) the view that oöphorectomy is by far the most important factor in the treatment and that it may be the only one.

I am, Sirs, yours faithfully,

April 25th, 1899. STANLEY BOYD.

"THE PATHOLOGY OF THE PERICARDIUM."

To the Editors of THE LANCET.

SIRS,—Mr. Harold L. Barnard's paper in THE LANCET of April 22nd, on "Certain Points in the Pathology of the Pericardium" is a very valuable one. What he says about the pericardium carries conviction, but I do not think the entire paper equally convincing and it is for this reason and also because the subjects treated in it are so important that I venture to send the following comments.

1. Cohnheim pointed out several years ago that the influence of gravity on the upward flow is neutralised by muscular contractions and by the aspiration of the thorax.

2. It is generally held, and Mr. Barnard accepts the view, that the respiratory movements aid the circulation. I am doubtful whether under ordinary circumstances they do so to an appreciable extent. Granting that the rhythmic descent of the diaphragm forces blood into the right heart, it is doubtful whether the expansion and contraction of the lungs facilitate the blood-flow. The aspiration of the thorax is in large measure independent of thoracic movement. Mr. Barnard writes as though it only occurs during inspiration, while as a matter of fact it continues in operation under ordinary circumstances to the end of expiration. Thoracic aspiration is chiefly due to the stretching of lung tissue, and this stretching is the same in inspiration and expiration; some aspiration, however, is due to the fall of intra-pulmonary air-pressure during inspiration, but the accelerating influence of this on the circulation is, so it seems to me, entirely neutralised by the increased intra-pulmonary pressure which takes place during expiration. I say the aspiration of the thorax is largely

independent of thoracic movement; it may be increased simply by increasing the mean size of the chest, as by inflating the chest to the utmost and limiting the expiratory range. In this way the transference of blood from the cavæ to the aorta is facilitated. It may be further aided by prolonging the inspirations at the expense of the expirations, for by this means the period of quickened pulmonary flow (from diminished intra-pulmonary tension) becomes longer than the period of retarded flow (from increased intra-pulmonary tension). In such athletic exercises as running, when it is desirable to facilitate the pulmonary flow to the utmost, we see these principles in operation: the mean size of the chest is increased—inspirations being full and expirations shallow—and as breathlessness increases the latter become shorter than the former. Directly this modified rhythm occurs we may regard the pulmonary movement as aiding the circulation, but not before. I wish to emphasise the increase in the mean size of the chest which occurs in dyspnœa. It takes place in pathological as well as in physiological breathlessness. I never remember to have seen a case of dyspnœa in which the chest was not expanded (see my "Respiratory Exercises in the Treatment of Disease," p. 91 *et seq.*).

3. Mr. Barnard contends that the expiratory act favours the pulmonary circulation. During the expirations which accompany vigorous exercise the lungs are (using his own words) "squeezed empty like a sponge into the left ventricle." Now, I am not denying that in some cases where it is desirable to aid the pulmonary flow the lungs may be forcibly squeezed in this way, but such occasions must be rare. As I have already pointed out, expirations tend to be incomplete when there is difficulty in the pulmonary circulation. Let anyone run quickly up a hill so as to get greatly out of breath and he will see how imperious is the instinct to keep the lungs well expanded and how very difficult it is to fight against this instinct and forcibly squeeze the lungs by a deep expiration. There is no doubt that blood may in this way be forced out of the lungs into the left ventricle, but on the other hand the output from the right ventricle is diminished by their compression—witness the effect of a forcible expiration on the superficial veins—and does not this more than counterbalance the increased output? Moreover, one does not see the need for squeezing the blood out of the efferent side of the pulmonary circuit; once there the blood has little difficulty in reaching the left heart if the latter be sound, seeing that the blood in the pulmonary veins always flows under a positive pressure.

4. The view that the rhythmic descent of the diaphragm aids the hepatic circulation was put forward some years ago by Mr. Mayo Collier. The difficulty I find in accepting this view is the absence of valves in any of the vessels concerned. Mr. Barnard says the diaphragm in its descent "squeezes the portal vein." Does he mean by this that it more or less completely obliterates this vessel? If it does, then, indeed, the hepatic circulation must be aided in the way suggested, but otherwise would not compression of the liver tend to drive the blood as much one way as the other? And is there any evidence that the portal vein is materially narrowed by the descent of the diaphragm?

5. Mr. Barnard's remarks on the abdominal force-pump action in extensive pericardial effusion solve a difficult problem. Some such action seems to be necessary in order to keep the right auricle and cavæ from collapse. It is somewhat doubtful, however, whether the force-pump comes into action under physiological conditions. In most vigorous exercises there is no need whatever for it, so rapidly is the blood pumped from the muscles into the cavæ. The action of the abdominal muscles in such cases is, moreover, *for the most part continuous* and this tends if anything to impede the return of blood from the lower extremities. I do not understand Mr. Barnard's remark: "During vigorous exertion this sphere of skeletal muscle contracts with *each inspiration*" (my own italics).

Although there are other points which I might refer to I have already, I fear, occupied too much of your space, but I trust the importance to the physician of the subjects dealt with will be considered a sufficient excuse.

I am, Sirs, yours faithfully,

Wimpole-street, W., April 24th, 1899. HARRY CAMPBELL.

SPERMINUM POEHL.

To the Editors of THE LANCET.

SIRS,—My attention has been called to a circular which has been issued in French by the *Journal Russe de Chimie médic. et de Pharm.* The circular is an advertisement of Poehl's spermine, a drug to which it attributes universal therapeutic value. It states that all reports on the action of this substance will be considered by a special international committee of clinicians and physiologists, whose names are given. Those representing Great Britain are Dr. Lauder Brunton, Dr. W. H. Dickinson, McHardy, Harrison, Payne, Dr. T. R. Fraser, and myself. The use of my name in this connexion is entirely unauthorised. I know nothing of the drug or of any such committee. I imagine the same must be true of the others whose names are mentioned.—I am, Sirs, yours faithfully,

London, April 23rd, 1899. W. D. HALLIBURTON.

THE SICK FOREIGNER IN ROME.

To the Editors of THE LANCET.

SIRS,—Will you allow me to draw the attention of the profession to the serious responsibility which attaches to the recommendation of Italy as a health resort or a holiday ground owing to the absence of any proper accommodation for the reception of sick ladies in Rome? Recently called to Rome by the news that one of my daughters had typhoid fever, contracted in Sicily, I went out accompanied by a skilled nurse. I found that my daughter had been moved to a nunnery, carried thither at 10 P.M. by the Fratres Misericordiæ, and was met by the Mother Superior on introducing the nurse by the emphatic declaration, "Jamais je n'admettrai une infirmière ici." I have no words but kindly and grateful ones in which to acknowledge the gentleness and kindness with which my little girl was treated by the good sisters, and my own nurse was allowed (as a friend) to take charge of the patient at night. But these good ladies expect to nurse "by the grace of God," which going a long way is not sufficient in a case like this when the patient is left entirely all night and moved on to a mattress on the floor to change the bed mattress by one little nun, washed with a sponge used for all purposes, &c. The magnificent clinical hospital which was shown to us five years ago at the congress in Rome is still unopened and there is no prospect of its wards being occupied. Those who desire to lessen their responsibility may do so to some degree by helping forward the establishment of the Anglo-American Nursing Home referred to in a paragraph of the *Times* of last week, of which the treasurer is E. F. Ede, 25, Via Gregorina, Rome.

I am, Sirs, yours faithfully,

JOHN H. GALTON, M.D. Lond.

Norwood, S.E., April 23rd, 1899.

THE SENDING OF PHTHISICAL PATIENTS TO NATAL.

To the Editors of THE LANCET.

SIRS,—There is a growing practice among medical men in this country of recommending consumptive patients to go to Natal and other parts of South Africa and under certain conditions the advice is good, but there have been cases in which that advice has been followed by lamentable consequences. In those cases where the disease is only threatened or has become but slightly developed and there is a reasonable prospect of recovery, provided that the patients have sufficient means of their own for their support let them go to South Africa by all means, but not otherwise.

The facts should be known that as regards Natal (and the same may be said of other parts of South Africa) there is no provision for the treatment of consumptives otherwise than in the hospitals, that the expenses in cases of sickness are greatly in excess of the expenses in this country, and that the private benevolence of the small European community is apt to be overstrained. It is therefore extremely undesirable that invalids in the last stage of consumption should be sent out there to die or to be sent back in a dying condition. I write this letter by desire of the Government of Natal in the hope that by its publication in the columns of THE LANCET medical men in this country may realise the position more clearly.

I have the honour to be, Sirs, your obedient servant,

WALTER PEACE,
Agent-General for Natal.

Natal Government Agency, Victoria-street, S.W., April 20th, 1899.

"THE ROYAL BERKSHIRE HOSPITAL."

To the Editors of THE LANCET.

SIRS,—In the annotation "The Royal Berkshire Hospital" in THE LANCET of April 15th, in the last portion of the paragraph you imply that the physicians have practised as surgeons. As senior physician may I beg you to correct the error, as a false impression will naturally be inferred, since there has not been any alteration of the rule whatever in this respect? The preceding physicians as well as those now holding the appointments have and do practise medicine purely and entirely.—I am Sirs, yours faithfully,

CHARLES W. MARRIOTT, M.D. St. And.,
Reading, April 25th, 1899. M.R.C.P. Lond.

"FERMENTATION WITHOUT YEAST CELLS."

To the Editors of THE LANCET.

SIRS,—In reference to your annotation on this subject which appeared in THE LANCET of April 15th, in Schultzenberger's book on "Fermentation," published in England by H. S. King and Co. (1876), there occurs at page 148 the following statement of M. Béchamp: "Yeast like every living organism shows phenomena of two kinds—those of nutrition and assimilation which are subordinate to the presence of its nutritious principles (sugar, nitrogenous compounds, mineral salts). These various principles, penetrating by endosmose into the cell, undergo there suitable transformations, and are converted into tissues of recent formation in the new cells which are formed by budding. Together with these phenomena of nutrition, and side by side with them other inverse reactions, those of disassimilation, take place, by which the tissues are changed into excrementitious products, unsuited to the life of the cell, and these are eliminated. *The production of carbon dioxide and of alcohol are the consequences of this process and belong to disassimilating reactions.*"

I am, Sirs, yours faithfully,

J. INGLIS PARSONS.

Queen-street, Mayfair, W., April 18th, 1899.

REGISTRATION OF COLONIAL DEGREES

To the Editors of THE LANCET.

SIRS,—A small paragraph in the report of the proceedings of the Executive Committee of the General Medical Council on Feb. 27th last under the heading "Colonial Degrees," deserves the attention of all colonial practitioners and also of all those interested in the higher education of women.

In 1897, Calcutta University conferred its M.B. degree on a woman graduate who was then awarded the "Elgin" scholarship on condition that she obtained a registrable British qualification. Finding that women are not yet admitted to the Fellowship of the Royal Colleges of England and Scotland she passed the examination of the Irish College of Surgeons, and received the diploma of Fellow in May, 1898. Application was made to the Registrar of the General Medical Council, who registered the M.B. degree but refused to register the Fellowship diploma on the grounds that "a colonial qualification can be added to a name on the General Register as an additional qualification, but British qualifications cannot be so added to names on the Colonial List": this is the opinion of Mr. Muir Mackenzie. Part 2 Section 14 of the 1886 Act states that the provisions of the Medical Act, 1858, shall apply in the case of colonial practitioners when registered under the Act of 1886. This lady *was* registered under the Act of 1886 and therefore she appears entitled to have an additional qualification added to her name on the Colonial Register under Section 30 of the 1858 Act. As the non-registration of this Fellowship diploma debars the holder from appointments to which she legitimately aspires and the Registrar informs me that similar applications have been refused on previous occasions, I have applied to the Privy Council for a direction to the General Medical Council so that the question may be definitely decided, though as it affects many colonial students I should have preferred the application to have been made by the Irish College of Surgeons or the Scottish Association for the Medical Education of Women.

I am, Sirs, yours faithfully,

CHARLES FREDERICK KNIGHT, M.D. R.U.I.
Edinburgh, April 20th, 1899.

"A CRITICISM OF THE MORE COMMONLY EMPLOYED TESTS FOR ALBUMIN IN URINE."

To the Editors of THE LANCET.

SIRS,—I observe in THE LANCET of April 22nd a criticism of the tests for albumin. By an odd coincidence I had sent you on March 3rd the result of some experiments made in my laboratory on the delicacy of the common tests. May I ask Mr. Cammidge whether he has verified his statements himself by appeal to his chemical balance or whether he has taken his results from books? I may state that his results do not agree with the results of my experiments.

May I be allowed to express the opinion, without referring specially to Mr. Cammidge's paper, that the prevalent craze for bibliography is against medical progress? It is supposed to show an academic mind, but it should be remembered that owing to outside pressure the academic mind is waking up to discover that it will have to change its methods to keep pace with modern progress. All honour should be paid to those who have advanced medical science in the past, but the details of their work, often obtained by pupils, should not be allowed to become crystallised.

I am, Sirs, yours faithfully,

Glasgow, April 24th, 1899. WALTER COLQUHOUN.

"SECRET COMMISSIONS AND THE MEDICAL PROFESSION."

To the Editors of THE LANCET.

SIRS,—Every right-minded member of the medical profession must endorse your remarks upon the subject of secret commissions between medical men on the one hand and vendors of surgical instruments on the other. Apart from such illicit compact there appears to me to be another side to the question an ignorance of which may sometimes lead the public to think that a medical man has reached a basis of understanding with those who supply his wants. This is especially likely to be the case as regards ophthalmic surgeons and opticians. Clearly, there are advantages about sending clients to a particular optician, since one's wishes are then more likely to be respected and blunders rectified without additional burden upon the patient's purse. For my own part, therefore, I generally advise my patients to get their glasses from a specified optician and, if necessary, even go to the length of dissuading them from taking my prescription into the first spectacle-maker's shop which they may chance to see after leaving my house. I need scarcely add that my recommendations are the outcome not of any commission, secret or otherwise, but of a wish to send people to a place where I know their wants will be properly attended to. It is possible, nevertheless, that some business men may suspect another and more interested motive to lie at the root of the advice.

I am, Sirs, yours faithfully,

April 22nd, 1899. S.

EXTRA-UTERINE FŒTATION.

To the Editors of THE LANCET.

SIRS,—The concluding paragraph of Mr. C. Hamilton Whiteford's paper on a case of ruptured tubal pregnancy in THE LANCET of April 15th touches a point of great importance. In three cases of early rupture of tubal pregnancy the patients or their husbands have informed me that they have practised what the husband calls "withdrawal" to prevent conception, and in other cases, although neither husband nor wife would directly answer the question delicately put, I have strong reason to believe that this practice was adopted. The relation between the unnatural pregnancy and the unnatural coitus cannot be a mere coincidence; and I cannot but believe that the very frequent occurrence of extra-uterine fœtation at the present time is the definite result of the adoption of certain means to prevent conception.

Not very long since I was called to see a patient about 50 miles from the place where I live. The medical man in charge as we walked from the station described the symptoms and history of the lady and said that although at first he had suspected pregnancy the husband "had offered to lay him any odds that his wife was not pregnant." Before I went upstairs to see the patient I interviewed the husband and elicited from him that his confidence on this point was due to his having adopted the practice to which

I have alluded. When I saw the patient I found that the case was one of undoubted rupture of an early tubal pregnancy. Another patient informed me that she had been told that it was wicked of her to go on bringing children into the world and a friend had instructed her how to avoid it. The instructions were carried out and within 12 months I was summoned to this patient with the symptoms of ruptured tubal pregnancy and had her at once removed into the hospital for operation, the necessity for which happily did not arise, the case doing well without it. These and other cases have so strongly impressed upon me that there is a distinct relation of cause and effect between the unnatural coitus and the unnatural pregnancy that I have felt it my duty—where I have had reason to suspect that the practice was being adopted—to warn the husband of the risk which attached to it, and I would urge upon my colleagues, putting on one side the natural delicacy which would prevent their approaching this subject, to ascertain by judicious examination whether my view of the matter is correct or not and to warn those who thus (and not by continence) seek to avoid parental responsibility, of the serious risk which the practice involves.

I am, Sirs, yours faithfully,

April 18th, 1899. A PROVINCIAL SURGEON.

"DIFFICULTIES UNDER THE NEW VACCINATION ACT."

To the Editors of THE LANCET.

SIRS,—In THE LANCET of April 15th "Fairplay," writing under the above heading, takes a deal of trouble to prove what no one questions. Of course, the practitioner who attends the mother and child for the first nine days may with advantage discuss the whole medical future of the child, and advise not only on vaccination, but on the care of the teeth and even the precautions to be taken at puberty; and it is not at all improbable that he will be then engaged to vaccinate at some future date. But it is perfectly outrageous to declare that it is his duty to make a definite arrangement for the vaccination, and to say that "he must ignore the law" if it is not done. How about cases attended by a midwife—a class of cases which will probably become more common when the new practitioners appear under the Midwives Act? May all the doctors in the neighbourhood call with vaccine, or are these cases to be the perquisite of the public vaccinator? Surely, one who signs himself "Fairplay" must see that it is only fair play to allow anyone to call and offer his professional services if the public vaccinator may do so. But if this is allowed the rule which forbids professional touting ceases to act, and with it will go, I believe, several other rules of etiquette.

I do not think "Fairplay" quite understands the foundations on which professional etiquette rests, or he would not use arguments which apply equally well against all forms. I have heard many people "complain bitterly" against the etiquette which forbids advertising, and they truly point out that advertisements by the leading consultants, giving their hours, fees, &c., would be a boon not only to the public, but also in a measure to the profession. They object in the same way to the rule which prevents them from calling in another opinion without first informing the regular attendant. "With such collusion the second opinion is useless," they say with some truth. They object equally to the rule which forbids touting, and I have heard practitioners highly praised for a time because they called regularly for orders. The advantages of professional etiquette are by no means immediately obvious in every case, but experience teaches that without it the profession rapidly loses its dignity and self-respect, and the loss of these qualities would ultimately prove an incalculable loss to the public. When we read that these visits of the public vaccinator are received with insult and contempt even a strong partisan of this iniquitous Act like "Fairplay" must surely realise that there is something wrong and must see that the work is inconsistent with the dignity of our profession. As he hints in his former letter it is policeman's work and until the parents have signified their willingness to comply with the law the medical practitioner should have nothing to do with it. The "bothering" (to use "Fairplay's" own term) of the public and their fellow practitioners is work very unworthy of any of our calling; the very use of the word betrays a knowledge of the unpleasantness of the task which his letter in vain tries to conceal.

I am, Sirs, yours faithfully,

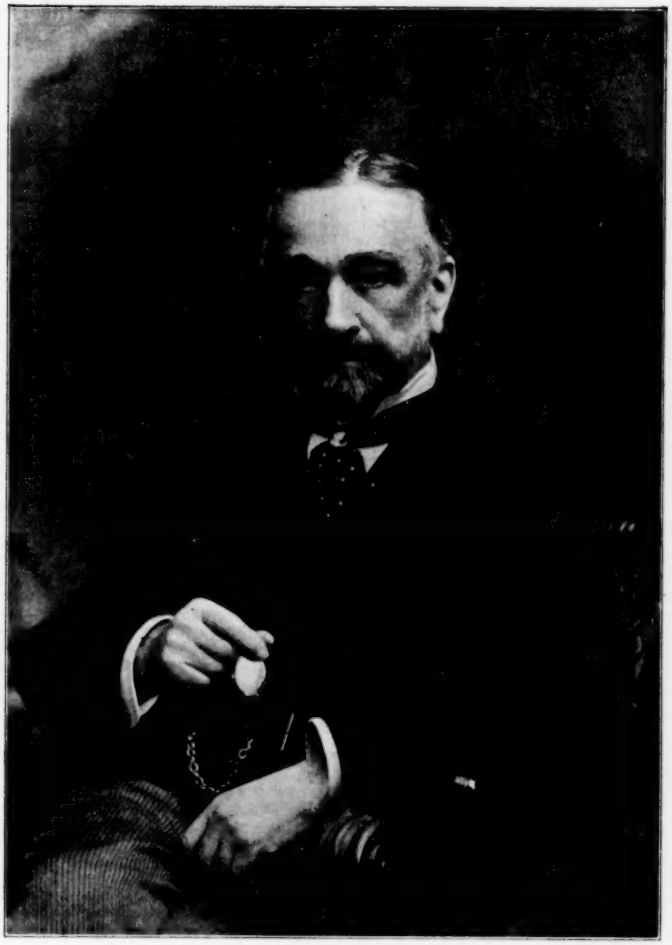
April 24th, 1899. P. P.

Obituary.

SIR WILLIAM ROBERTS, M.D., F.R.C.P. LOND., B.A., F.R.S.

WILLIAM ROBERTS was born at Bodedern, Anglesea, on March 18th, 1830. He was the seventh and youngest son of Mr. David Roberts of Mynydd-y-gof and Sarah, daughter of Mr. J. Foulkes of Machynlleth, Montgomeryshire. Mr. David Roberts farmed his own land in Anglesea and in addition practised as a surgeon in the neighbourhood, where indeed he was the only medical man. The homestead at Mynydd-y-gof was a well-known centre of hospitality for the neighbourhood and Sir William Roberts's parents were strong supporters of Methodism, which then, as now, was a great power in Wales. Both of Sir William Roberts's parents lived to a great age. Several of his brothers achieved distinction in Manchester and elsewhere and one of them, Alderman J. Foulkes Roberts, was Lord Mayor of Manchester in 1897–98.

William Roberts was educated at Mill Hill School and entered University College, London, as a medical student in 1849–50. He had a distinguished career as a student at University College and attracted the attention of his teachers by the earnestness and thoroughness of his work. His interest in physiological problems, which persisted throughout his life, was aroused during his early student career by the influence of the teaching of Sharpey. Walshe, Garrod, Jenner, Quain, Hare, and Erichsen were amongst the teachers at the time when William Roberts was a student and Wilson Fox and George Buchanan were his contemporaries, the late Sir J. Russell Reynolds being slightly senior to him. Roberts was dresser to Mr. Erichsen in 1851–52 when Joseph Lister, now Lord Lister, was house surgeon, and Lord Lister recalls at the present time his alertness and brightness of manner combined with great assiduity and thoroughness in all his work. He graduated as B.A. in the University of London in 1851, taking the highest honours in chemistry and animal physiology, and became a Member of the Royal College of Surgeons of England and a Licentiate of the Society of Apothecaries in 1853. In 1853 he also took the degree of M.B., obtaining the scholarship and gold medal in physiology and comparative anatomy and the gold medal in medicine at the final examination and the medal and exhibition in chemistry at the first M.B. He took the degree of M.D. of the University of London in 1854, and in 1864 was elected a Fellow of University College, London. In addition to studying in the Medical School of University College William Roberts afterwards studied in France and Germany, and there doubtless he laid the foundations of his intimate knowledge of the medical literature of those countries, and to the end of his life he was thoroughly conversant with the modern advances made abroad, more especially in his own branch of medicine. On returning from the Continent he was appointed in 1854 house surgeon to the Manchester Royal Infirmary, and very soon afterwards, at the early age of 25 years, he was, on July 26th, 1855, appointed without any opposition to the post of full physician to the Royal Infirmary and lecturer on anatomy and physiology in the Royal School of Medicine, Manchester. This appointment is probably unique, as although occasionally a medical school appoints a man as young on its staff such an appointment is rarely made without opposition. He was appointed lecturer on pathology in 1861 and in 1863 lecturer on the principles and practice of medicine at the Owens College, with which the Royal School of Medicine was then united. Dr. William Roberts remained on the staff of the Manchester Royal Infirmary until Feb. 26th, 1883. He was thus on the active staff for nearly 30 years and during the whole of this time he was an energetic teacher of clinical medicine and played a conspicuous part in the development of this great provincial school of medicine. His clinical teaching, which appealed more especially to the senior and advanced students, was remarkable for its thoroughness and lucidity, and his custom was rather to investigate thoroughly at one visit two or three of the cases in his wards than to make more general and discursive remarks on a greater number. The high character and efficiency of his teaching was recognised not only by the success of his pupils but also by his being appointed the first Professor of Medicine in the Victoria



SIR WILLIAM ROBERTS, M.D., F.R.C.P. LOND., F.R.S.

University when the Victoria University received a charter enabling it to confer degrees.

He was admitted a Member of the Royal College of Physicians of London in 1860 and in 1865 he was elected a Fellow of the College and his connexion with that body remained singularly close throughout his life. He delivered the Goulstonian Lectures before the College in 1866, the subject being the Use of Solvents in the Treatment of Urinary Calculi and Gout. He gave the Lumleian Lectures in 1880 and served on the Council in 1882, 1883, and 1884. He was a Censor in 1889 and 1890. Croonian Lecturer in 1892, and Harveian Orator in 1897. In the Lumleian Lectures on the Digestive Ferments and on the Artificially Digested Foods Dr. William Roberts brought together the results of an investigation on the digestive ferments extending over many years. These lectures and the work on which they were based probably form one of the most exact contributions in our language to a subject which is not only of great theoretical interest but of everyday importance in practical medicine. This happy combination of exact scientific inquiry on the one hand and the recognition of the needs of practical medicine on the other was perhaps one of the main characteristics of all his work. His original work on the digestive ferments dealt more especially with the activity of pancreatic extracts and the nature and conditions under which the digestive ferments produced their action on the starchy and proteid constituents of the food. He elaborated his conclusions on this subject in a paper on the Estimation of the Amylolytic and Proteolytic Activity of the Pancreatic Extracts communicated to the Royal Society in 1881. He also developed the practical side of this question in a series of five lectures delivered at Owens College in 1885 and subsequently published in "Lectures on Dietetics and Dyspepsia," and in 1891 in his work on "Collected Contributions on Digestion and Diet" he again brought up to that date the whole of his work in this branch of physiology and medicine.

In the Croonian Lectures in 1892 on "The Chemistry and Therapeutics of Uric Acid Gravel and Gout" he made most important contributions to our knowledge of these disorders. This work, like that recorded in the Lumleian Lectures, was the result of a long series of observations characterised by extreme precision in execution and great originality of conception. His observations on the relationship existing between the forms in which uric acid exists in the blood, in the urine, and in gouty deposits were most interesting and instructive. Although Sir William Roberts made no contribution to the question which is at present exciting some attention as to whether uric acid exists normally in the blood or not, his experiments showed conclusively that if it did it would be present in the form of a quadriurate, and he demonstrated in the most interesting manner how these quadriurates, as the result of comparatively simple chemical interchanges, could be decomposed with the formation of the acid urates which are so characteristic of gouty deposits. He further demonstrated that by other chemical decompositions the quadriurates might readily liberate free uric acid. He showed that uric acid when dissolved in an alkaline medium such as the blood serum or an artificial serum was dissolved in the form of a quadriurate, and that, provided the quantity dissolved was sufficient and the reaction of the medium suitable, this quadriurate in the course of a variable time decomposed, liberating an acid urate, and that the rapidity of this decomposition was more especially favoured by the amount of bicarbonate of soda and sodium chloride and other salts present in the medium. In other words, given the presence of a quadriurate in an alkaline fluid such as the blood plasma, sooner or later, as the mere result of chemical interchanges, provided a sufficient quantity of the quadriurate was present, a decomposition of the quadriurate must take place with the formation of the more insoluble acid urate. He showed further that in certain fluids such as synovial fluid this decomposition occurred more quickly than in others. By these experimental observations an important contribution to our knowledge of a portion of the pathology of gout was made. Similarly his observations on the conditions determining the precipitation of uric acid in the urine threw great light on the nature of gravel, since his experiments established the fact that the quadriurates in an acid medium like the urine readily decomposed, liberating free uric acid and that this decomposition was profoundly affected by such conditions as the reaction, the amount of salts present, the quantity of pigment, and so forth. He demonstrated that a great many other factors were concerned in the formation of gravel besides a mere excess of uric acid in the blood or in the urine and that the degree of concentration and the reaction of the urine were factors as important as the mere excess of uric acid. In this way he afforded a most satisfactory explanation of a well-known fact—that dilute urines often deposit uric acid abundantly, whereas in concentrated urines with an abundance of saline ingredients a deposit of urates occurs.

In the Harveian Oration delivered in 1897 he took as his subject "Science and Modern Civilisation," elaborating a theme which had been present to his mind for many years on the differences between the foundations of modern and ancient civilisations, the latter resting more on art, the former on science. He held strongly the view that modern civilisation was for this reason more stable and less liable to be destroyed by barbaric invasion than was the case with Roman and Grecian civilisation.

In 1865 Dr. William Roberts brought out the first edition of his work, "A Practical Treatise on Urinary and Renal Diseases." This work was a most important contribution to English scientific medicine, as notwithstanding the able productions of former writers on the subject there was no book in the English language which contained such a complete account not only of the more common but also of the rarer forms of renal disease. To illustrate this it is sufficient to refer even at the present time to the chapters on Cystic Diseases of the Kidney and on Chyluria. This work, however, made the reputation of its author, not only on account of its containing a vast amount of valuable information collected from various sources with reference to renal diseases, but perhaps more so on account of the abundant evidence which it contained of the original work of the author. It is not often that a text-book produced by a practical physician is quoted as authoritative on physiological questions by the writer of a text-book on physiology, but the work that Dr. Roberts carried on with reference to the facts of calculous anuria and the light which this threw on the physiology of the kidney were such as to call for remark in Professor Michael Foster's well-known text-book. Dr. William Roberts showed that when the functions of the kidney were arrested owing to obstruction of the ureters a peculiar train of symptoms was produced which differed in many respects from the uræmia of Bright's disease, and however difficult the explanation of this may be the fact remains that not only was it an important contribution to practical medicine but it was of equal importance to the physiologist. Although probably the chapter on Suppression of Urine in this well known text-book is the one which contains the most striking evidence of original observation, yet there are records of many other original experiments, such as those on the diurnal variations in the acidity of the urine, and numerous observations on the estimation of sugar in the urine by fermentation, and also several tests and improvements of tests for the recognition of proteids and sugar in the urine. His experiments on the estimation of sugar by variations in the density of the urine after fermentation afford again a striking instance of the character of the man's work; the painstaking accuracy, the neatness and simplicity of the method, and the exactness of the results obtained all show the striking capacity that he had as an original observer. During his last illness and up to a short time before his death he was greatly interested in a further modification which he had devised in this method and on which he was still making observations. The "Practical Treatise on Urinary and Renal Disease" rapidly reached a second edition and the fourth edition was published in 1885. Without disparaging any of the other numerous works it may be fairly said that it was the most important work produced on this subject in the last 30 years. He also contributed articles on "Wasting Palsy" and "Diseases of the Kidney" to Reynolds's System of Medicine, on "Renal Diseases" to Quain's Dictionary of Medicine, and on "Gout" to Allbutt's System of Medicine.

Dr. William Roberts was elected a Fellow of the Royal Society on June 7th, 1877, and he served on the Council in 1890–91. His researches in histology, physiology, and pathological chemistry were the grounds for this honour. His most important papers communicated to the Royal Society were—(1) "On Peculiar Appearances exhibited by Blood Corpuscles with Solutions of Magenta and Tannin" (Proceedings of the Royal Society, 1863); and (2) "Studies on Biogenesis," published in the Philosophical Transactions

for 1874. The former paper dealt with the staining reactions and structure of the blood corpuscles and the peculiar manner in which tannin causes the hæmoglobin to be extruded, and the results detailed in this paper were used for the next 30 years in the routine instruction of succeeding generations of medical students. In the paper on Biogenesis Dr. Roberts broke new ground, and this research dealt with the question of spontaneous generation and of what was known in those days as the "panspermic" hypothesis. He records a number of most carefully devised experiments with reference to the sterilisation of liquids, such as milk, urine, hay infusion, &c., and the conditions affecting the sterilisation and the growth of bacteria in such liquids, such as the intermittent application of heat, the degree of heat necessary, discontinuous sterilisation, &c. He also deals with the influence of the reaction of the medium, showing by many ingenious experiments that alkaline nutritive media were far more difficult to sterilise than acid. His paper is most interesting reading at the present day when we remember the great advances which have been made in sterilisation and in bacteriology. The conclusions arrived at in the paper communicated to the Royal Society were further developed in the year 1877 on the occasion of the British Medical Association visiting Manchester, when he gave an address on medicine, taking as his subject "Contagium Vivum and its Application to Medicine." Sir William Roberts's scientific work thus covered a very wide field, but whether dealing with histology, physiology, or practical medicine all the work was characterised by the same scrupulous accuracy and those who knew him well know the great number of control experiments of various kinds which were carried on often for years prior to any publication being made. It must be also remembered that all this scientific work was carried out during a period when the author was actively engaged in a large and rapidly increasing consulting practice in Manchester. The above short review of his work would not be complete without drawing attention to his first publication, an "Essay on Wasting Palsy," published in the year 1858 which was characterised by the same thoroughness and which affords further evidence that he was in no sense a specialist but took a broad view of medicine. This essay was the first systematic treatise on this disease in the English language.

In 1879 Dr. Roberts received the Cameron Prize for his contributions to practical therapeutics, more especially in relation to the dietetic treatment of disease, and at the meeting of the British Medical Association at Cardiff in 1885 he delivered an address on "Feeding the Sick." In 1895, when the Association met in London, he was President of the Section of Pharmacology and Therapeutics. In 1885 Dr. William Roberts, greatly to his own surprise and without any previous communication to him, received the honour of knighthood, the first intimation of his preferment being a paragraph in a Manchester paper. The medical profession in Manchester and the surrounding district entertained Sir William Roberts at a banquet at the Queen's Hotel in celebration of this event. In 1889 Sir William Roberts removed to London chiefly to obtain more leisure from the incessant calls of a very large consulting practice, and during the last 10 years of his life, whilst maintaining his interest in, and actively pursuing, several branches of scientific inquiry, he embarked on a new career of usefulness in the more official and administrative departments of the profession. In 1892 he was appointed a Fellow of the University of London and soon afterwards became an active member of the Brown Committee, a sub-committee of the Senate of the University of London having the general management of the Brown Institution. His interest in this institution was great and on the death of Sir Richard Quain in 1897 he was unanimously elected chairman of the Brown Committee, a post which he retained until November, 1898. He represented the University of London on the General Medical Council from 1896 to the time of his death and his keen interest in the great question of the provision of adequate university teaching in London was recognised by his appointment as a member of the Statutory Commission appointed in 1898 to deal with this matter. His rapid failure of health caused him to resign this but a few weeks ago. In 1893 he was appointed the medical member of the Opium Commission. He always looked back on his experience in India on this Commission as one of the most interesting events of his life. He took a broad view of the opium question, largely founded on the result of his keen observation of its supposed ill-effects, whilst in India. In addition to carrying out the routine work of a Commissioner he found time to bring before the profession the value of anarcotin as an anti-periodic. In addition to serving on the Opium Commission Sir William Roberts in 1897 served on a committee appointed by the Home Office to investigate the question of the effects of moisture in weaving sheds on the health of the workers, and Sir Henry Roscoe, who was one of his colleagues in this inquiry and a life-long friend, having been a fellow student with him at University College, writes: "One of the last as well as one of the most important subjects as influencing the health of the people in which Roberts took the greatest interest was a Home Office inquiry in 1897 into the effect of the use of steam in weaving sheds upon the health of the operatives in the Lancashire cotton mills. Sir William Roberts became my colleague together with Dr. Arthur Ransome, F.R.S., and all three being Manchester men we were well acquainted not only with the district but with the habits of the people. The evidence obtained and the report and recommendations sent into the Home Office were of so satisfactory a character that all danger of dispute between employers and employed, which at one time threatened to be serious, has been removed. To this end the high scientific abilities, professional knowledge, and sound common sense of Sir William Roberts greatly contributed."

Although the long record of Sir William Roberts's scientific work and professional attainments is more than sufficient to account for the esteem in which he was held by his fellow practitioners, yet it was more especially the singularly affectionate and gentle disposition that lay behind an apparently reserved exterior which endeared him to a wide circle and which causes many to feel that his loss is irreparable. All those who have been privileged to know him will miss the kindly wit that sparkled on every occasion and his friends know that it is no exaggeration to say that he was never known to express a harsh sentiment of anyone. Further, he was a man of the highest principles and his professional conduct was characterised by the greatest integrity. Sir William Roberts married in 1869 Elizabeth, daughter of Mr. Richard Johnson. This lady died in 1874 leaving as issue one son who died in 1893. During the last 20 years Sir William Roberts invariably spent some portion of every year at his country residence, Bryn, where he took the greatest interest in developing his estate. He was very solicitous for the comfort and well-being of his tenants, providing them with model farmhouses replete with modern improvements. He was very fond of country pursuits and in addition devoted a good deal of his time to the study of the flora of the district. He was also a keen fisherman and the river Dovey, flowing past his house, afforded him excellent sport.

Sir William Roberts suffered severely from influenza some two years ago and although in the course of time he recovered his usual alertness of manner, in the autumn of 1898 serious symptoms of ill-health developed which in November were recognised to be dependent upon a severe internal affection. The malady slowly progressed until death occurred on April 16th. The funeral took place at Llanymawddwy, Merionethshire, the village adjoining his country residence, Bryn, to which he was so attached, on April 19th, and was attended by his immediate relatives and a large concourse of friends, tenants, farmers of the neighbourhood, and schoolchildren bearing primroses. Dr. Thomas Harris (a former house physician under Sir William Roberts) and Professor Thomas Jones attended as representatives of the Medical Board of the Manchester Royal Infirmary. Professor Jones in addition represented the Senate of Owens College, and Mr. Matthews of Levenshulme attended as one of his old Manchester pupils.

THOMAS NEDLEY, M.D. KING'S COLL. ABERD.

DR. THOMAS NEDLEY, whose death occurred in Dublin on Tuesday last at an advanced age, was a well-known Court and public official and had for many years enjoyed a large private practice. He received his medical education in Dublin and Edinburgh, and later in 1856 graduated in medicine at King's College, Aberdeen. Dr Nedley was for many years surgeon to the household of the Lord Lieutenant of Ireland and medical officer to the Irish Educational Board. He also held until recently the post of medical officer to the Dublin Metropolitan Police. He was widely known in Irish society as a wit and *raconteur*.

WILLIAM HOPKIN THOMAS, M.D. ST. AND., M.R.C.S. ENG., L.R.C.P. EDIN., J.P.

DR. WILLIAM HOPKIN THOMAS died at his residence, Bronygarn, Maesteg, Glamorganshire, on April 13th, in his 59th year. The deceased received his medical education at King's College Hospital, London, and took the qualifications of M.R.C.S. Eng. and L.R.C.P. Edin. in 1863 and 1870 respectively. He graduated M.D. St. Andrews in 1894. Dr. Thomas had a large practice at Maesteg where he had resided for the past 33 years. He was formerly medical officer to the Maesteg Local Board and also surgeon to several collieries. Dr. Thomas was a magistrate for Glamorganshire and had been a member of the Maesteg District Council for several years. The deceased was highly respected in Maesteg and the district; he leaves a widow with seven children, for whom much sympathy is felt.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.—The deaths of the following eminent foreign medical men are announced:—Dr. G. L. K. Zedelius, who is described as the foremost of the German medical practitioners in Shanghai. He was chief medical officer of the hospital and was attached both to the German and Austrian Legations as medical attendant. He was 46 years of age.—Dr. Joseph Engel, who was assistant to Rokitansky until, about 50 years ago, he was appointed Professor of Pathological Anatomy in Zürich. Thence he migrated to Prague, where he was professor of the same subject, and from there he returned to Vienna, where he held the corresponding chair, not in the university, but in the Josefs Academy, the Military Medical School. He had been in retirement for several years and was in his 84th year.—Dr. Alfred Graefe, formerly Professor of Ophthalmology in the University of Halle. In early life he was assistant to his very eminent relative, Albrecht von Graefe. He was obliged to resign his chair some seven years ago on account of ill health. He published a number of papers on diseases of the eye and in conjunction with Dr. Saemisch a large Handbook of Ophthalmology.—Dr. Hüllmann of Halle, to whom the profession in Germany is much indebted for his activity in the region of medical politics.—Dr. Eugen Seitz who is well known as the author of a manual of Percussion and Auscultation and also from his connexion with Niemeyer's classical Handbook of Medicine. He was 82 years of age and died in Wiesbaden where he had lived for many years in retirement.—Dr. Theodor Neureuther, Professor of the Diseases of Children in the Bohemian University of Prague.—Dr. W. W. van Arsdale, Professor of Surgery in the New York Policlinic and Hospital.—Dr. J. A Benson, Professor of Physiology in the College of Physicians and Surgeons, Chicago.

THE GERMAN SURGICAL CONGRESS.

(FROM OUR BERLIN CORRESPONDENT.)

THE twenty-eighth congress of the German Surgical Association was opened on April 8th in Langenbeck House, Berlin, the president being Professor HAHN of Berlin.

Loose Cartilages in the Joints.

Professor KÖNIG (Berlin) read the first paper, the subject being Loose Cartilages (Gelenkkörper) in the Joints. He had seen 70 cases of this condition, eight of them being caused by arthritis deformans and 16 as the result of injury. With the exception of 10 cases all of them involved either the knee or the elbow. The great majority of the patients were young and all of them with the exception of three were of the male sex. There are as a rule rheumatic pains in different joints. The function of the joint is deranged, the power of extension being especially interfered with. In the first stage the adventitious body is attached to the cartilages so that it is sometimes difficult to remove it; in the second stage there is only a loose connexion with the cartilage and finally no connexion at all. In rare cases the free bodies may be absorbed. The etiology of the condition is not entirely known. Sometimes it follows injury; but in experiments made on dead bodies Professor König did not succeed in loosening any cartilaginous fragments. The diagnosis is made easy by skiagraphy.

Indications for Operations in Epilepsy.

Professor KOCHER (Berne), speaking on this subject, said that current opinion as to the possibility of curing epilepsy by an operation was much less hopeful than formerly. The statistics published by Dr. Graf and Dr. Braun showed a successful result in only from 2 to 4 per cent. of the cases. The excision of the cortical centre suggested by Professor von Bergmann was a real improvement, so that the results were now better. The essential point is to diminish intracranial pressure and the dura mater ought therefore to be incised in every instance. By this method a permanent cure was obtained in 54 per cent. of the cases. In the cured cases he had found that the wound in healing had formed a soft and yielding cicatrix, whilst in cases which relapsed the cicatrix was very dense. The influence of increased pressure in producing epilepsy was made obvious by experiments on guinea-pigs and the increase of pressure was demonstrated by a cannula introduced through the cranium. Foreign bodies introduced into the brain did not produce the disease. Sequestra must of course be removed, but the principal thing is to diminish pressure by excising pieces of the dura mater: the hole must not be made too large.—Professor VON BERGMANN (Berlin) said that epilepsy was caused by the so-called "spasmophilic" state of the brain, and that 90 per cent. of the cases were hereditary. Operations were successful only in the non-hereditary cases. With regard to reflex epilepsy he was of opinion that in hereditary cases epileptic convulsions caused, for instance, by a cicatrix in the sciatic nerve would persist even after the removal of the cicatrix, whilst in cases independent of heredity the operation might be successful. The only reliable operation was excision of the cortical centre. A definite opinion as to the success of the operation ought not to be given too early as he had seen a fatal issue even four years after the operation.

Porencephaly.

Professor VON BERGMANN said that four symptoms were characteristic of porencephaly—paresis and contractures, stunted growth of the extremities, epilepsy, and idiocy. He showed a young girl with a defect in the cranium in whom the above symptoms had been present. The aperture was closed by a plastic operation and the epilepsy ceased. A small cyst in the cortex communicating with the lateral ventricles was drained, but when the drain was removed the convulsions reappeared.

Recovery from Gunshot Wound of the Brain.

Mr. A. E. BARKER (London) reported the case of a man who had attempted suicide by firing a seven millimetre revolver bullet through his palate into the skull. There was at first only a little hæmorrhage from the nose and ptosis of the right side without loss of consciousness. On the twelfth day he vomited and on the twenty-eighth day there was hemiplegia. On the thirty-second day he was admitted into University College Hospital, London, with paresis of the left side. The patellar reflexes were increased and there was some vomiting, but there were no convulsions and no difference between the pupils. On the forty-second day the man's state had improved. By the Roentgen rays two bullets were seen, one being lodged in the corpus callosum and the other on the sphenoid bone. On the sixty-fifth day the patient had a severe epileptic fit preceded by giddiness and loss of consciousness. On the sixty-eighth day two fits occurred with convulsions, especially of the left side. On trephining it was found that there was considerable intracranial pressure and the bullets were removed. After the operation paresis of the left side returned but became better on the following day. The patient is now apparently recovered.

Professor KRÖNLEIN (Zürich), Dr. KÖSTL (Berlin), Dr. LAUENSTEIN (Hamburg), and Dr. VON BECKH (Carlsruhe), reported other cases of operation on the brain.

SECOND DAY.

Resection of the Vertebral Arches in Spondylitis.

Professor TRENDELENBURG (Leipsic) said that paresis of the extremities in spondylitis was caused by spinal pachymeningitis and operation should be resorted to when there was extradural exudation. Of 27 patients formerly treated in the Leipsic Hospital more than 80 per cent. died. Of those operated upon one died eight months after having left the hospital, four recovered, one was not improved, and three were still under observation. The operator having made a large semicircular incision over the protuberance removes the skin and the muscles from the bone and then resects the vertebral arches with Luer's forceps. It is necessary to remove the vertebral arches over the whole of the

compressed dura mater; the wound is then closed by sutures. In all the cases healing took place by first intention. Professor Trendelenburg summed up as follows: (1) paresis in spondylitis is caused by compression; (2) the compression is due either to pachymeningitis or to narrowing of the vertebral canal; (3) cases in the first stage should not be operated upon; and (4) success is possible even in very old-standing cases, the symptoms in one of his patients who recovered extending back to 17 years ago.

Micro-organisms in Wounds.

Dr. FRIEDRICH (Leipsic) said that it would be of interest to know whether the micro-organisms in wounds were immediately taken up by the circulation and whether they grew at once in the wound even during operations. The second question must be answered in the negative; in open vessels filled with blood-serum kept at the temperature of the body and covered after a certain time Dr. Friedrich found that the bacteria did not commence to grow for seven hours. The degree of pressure under which the virus is introduced into the wound is very important. It has been found, for instance, that the stump of the amputated tail of an animal when only dipped into a virulent culture of anthrax bacilli did not become infected, whilst injections made with the same culture killed the animal at once.

Latency of Micro-organisms.

Dr. SCHNITZLER (Vienna) said that pathogenic micro-organisms were often found in apparently healthy persons, and were especially apt to persist for a long time in convalescence after infectious diseases. This fact is of interest for the surgeon as explaining the relapsing form of osteomyelitis. Dr. Schnitzler found staphylococci in the scar in a case of osteomyelitis two years after healing had occurred. When micro-organisms were injected into the veins of animals he had found them after several weeks in the bone marrow and by fracturing a bone he was able to produce acute osteomyelitis 29 days after the injection.

Noma.

Dr. PERTHES (Leipsic) has made a bacteriological examination of two cases of noma. In the necrotic tissue there was of course a great mass of bacteria of various kinds, but at the margin of the necrotic part near the healthy tissue he found a micro-organism very similar to streptothrix and possessing a mycelium. These micro-organisms were present in both cases but only at the margin; inoculation of them into dogs gave rise to a slight necrosis but not to noma. Dr. Perthes, however, is of opinion that these micro-organisms are the specific cause of noma.

"Gangrène Foudroyante."

Dr. LINDENTHAL (Vienna) has observed six cases of this comparatively rare condition. As a rule it results from extensive lacerations of the extremities where the wounds have come into contact with earth or dust. Within 48 hours after the injury there occur diffuse œdema of the extremities, cyanosis of the skin, large vesicles on the skin, loss of sensation, and a peculiar crepitation of the tissues. The patient's general state is very bad and jaundice is very frequent. The anatomical changes consist in a progressive necrosis accompanied by the formation of gas. In five of the six cases he discovered an anaerobic bacterium and in the sixth case bacterium coli commune. Early amputation may perhaps save the patient, but death occurs in the great majority of cases.

NOTES FROM INDIA.

(FROM OUR SPECIAL CORRESPONDENT.)

The Spread of Plague.—Vital Statistics.—The Jigger in Bombay.—The English Plague Sisters.

WHILE the severity of the plague epidemic in India is not so marked (2689 deaths for the week ending April 1st) the disease seems to be spreading far and wide. Many fresh places have been attacked. Cases have occurred at Amritsar, at Falna, at Hyderabad (Sind), at Gurchah, at Nagpore, in the Jullundur district, and in the Bhagulpur district. Many places in the Bengal Presidency are showing evidences of the disease for the first time. The official account of plague in India gives the following figures, but they are probably much under the correct numbers: Bombay (and Sind), 2051, of which 992 are entered for Bombay city; Baroda, 142; Karachi, 213; and Thanu, 132. In the Madras Presidency it seems quickly declining, only 50 cases being recorded, of which North Arcot furnished 30. There were 108 in Mysore, 33 in Hyderabad (Deccan), and five in the Punjaub. In the Bengal Presidency there were 370, of which 191 were furnished by Calcutta, 13 in Darbhunga, 24 in the 24 Parganas, and 74 in Saran. In Karachi the disease seems to be spreading notwithstanding that the outbreak has already lasted nine weeks. In Poona, however, it keeps about stationary. In consequence of the plague having infected several places in the Bengal Presidency and being on the increase in Calcutta quarantine regulations have been instituted in Colombo. In Bombay there are indications of improvement, but the mortality is still terribly high, the rate for the past week being over 130 per 1000 per annum.

The differences of mortality among the various races and castes are interesting. They stand as follows: Jains, 144·3 per 1000 per annum; Brahmins, 93; caste Hindus, 159·6; low caste Hindus, 227·9; Mahomedans, 122·7; Parsees, 56·9; native Christians, 106 0; and Europeans, 32·2. The Mahomedans and the low caste Hindus seem to give false returns as to the causes of death very frequently, for notwithstanding their high rate of mortality very few cases comparatively are returned as plague. The outbreak of measles in Bombay is increasing, but I suspect that many cases of plague are recorded under this disease. Relapsing fever also continues prevalent, but diseases of the respiratory system seem to be most popular for covering deaths from plague. Judging from the number of births there is no reason to suppose that the population is above the average. In Poona, however, there is said to have been a great exodus, nearly half the town being empty.

In Calcutta the epidemic is only slowly increasing notwithstanding that the cases seem scattered all over the city. The average normal death-rate is 45·3 per 1000 per annum for Calcutta, but it is now raised to 54 4. All persons connected with the Government of India proceeding to Simla have been very carefully examined and will be kept under observation for 10 days. Measures have recently been instituted for the examination of all passengers out of Calcutta, both by rail and boat, with the object of protecting the Mofussil. As, however, this is already and considerably affected the arrangements come much too late. Moreover, as the examination of passengers is hasty and superficial only persons who are markedly ill can be recognised. An exodus of natives from Calcutta has commenced notwithstanding the attitude of non-interference taken by the authorities. Large numbers are leaving by routes other than those generally used in order to avoid medical inspection. The Marwaris are the chief offenders in this respect.

Minor disturbances are continually occurring at different places in connexion with plague operations, but a somewhat serious one is reported from Nagpore. Plague officers of high rank were stoned and were obliged to take refuge in the Mayo Hospital. A washerman's child was being removed to hospital when the disturbance commenced. There is a strong and widespread feeling among the poorer classes in Nagpore against the plague regulations which is fostered by some of their richer brethren and all sorts of false rumours are maliciously circulated.

Various rumours have been put about in Calcutta as to supposed forthcoming regulations, which have created a feeling of discomfort among the native population, and it will not be surprising if disturbances occur here also.

Twelve patients are suffering from jigger in the Goculdas Tejpal Hospital, Bombay, the disease having been newly imported from British East Africa. Jigger is a very minute flea and the disease is caused by the fertile female which burrows under the skin. Any part of the body may be attacked but the feet are usually infested mainly between the toes and near or under the toenail. The presence of the insect under the cuticle is at first marked only by a minute black spot which may be invisible without a magnifying glass especially in a dark skin. The parasite soon enlarges to the size of a small pea by development of the egg sac which when mature looks like a drop of pus beneath the cuticle with the body of the flea as a black spot in the centre. If left alone the sac bursts and the eggs escape. Severe pain attends the presence of the parasite and troublesome ulceration may follow. Captain Kilkelly, I.M S., first reported that jigger had firmly established itself at Mombassa and when his regiment was voyaging to Bombay no less than 26 cases occurred. He

thinks that there is no reason to doubt the probability that this insect will establish itself in India. There are Government resolutions regarding the measures to be taken to prevent the importation of jigger into India and the attention of civil surgeons and others has been drawn to them. It is important to treat promptly cases in which the abscesses have not burst in order that the chances of the flea's eggs being scattered may be diminished by breaking the egg sac.

The *Englishman* of Calcutta in a leading article thus refers to the treatment of the English plague sisters: "The sisters engaged by the Secretary of State for plague work in this country are fast returning home as their term of agreement with the Indian Government ends. They find more money is to be made at home and probably the best of them will be leaving at the end of this year. Rs. 175 per mensem is the pay (less income tax) of these hard-working women who daily risk their lives for a pittance which barely covers their expenses. A few are paid Rs. 250 and Rs. 300 per month and it is to be hoped that the Indian Government will see its way to paying all these ladies an equivalent sum. It must if it wishes to retain any really good nurses. It was the wish of the Bombay Government to increase their pay but the Surgeon-General of Bombay considered that they had enough." As I have said before, the work is severe, the climate is trying, and the pay is insufficient. The insufficient pay is not the only complaint and there is a vast difference in the way in wnich they are treated by the various authorities.

April 6th.

LIVERPOOL.

(FROM OUR OWN CORRESPONDENT.)

The Opening of the School of Tropical Diseases by Lord Lister.

THE School of Tropical Diseases was inaugurated on April 22nd by Lord Lister with *éclat* and the ceremony was graced by the presence of distinguished guests from all parts of the Kingdom. The provision made at the Royal Southern Hospital for the reception and treatment of tropical cases in the Samuel Henry Thompson ward includes all that can be desired and reflects much credit on the committee and the medical staff. The inaugural banquet held at the Adelphi Hotel in the evening, with Lord Lister as principal guest, passed off in a highly successful manner. Mr. Alfred L. Jones (the chairman of the School of Tropical Diseases) made a genial chairman. The speeches were of a high order and were enthusiastically applauded.

University College, Liverpool: Post-Graduate Courses.

Post-graduate courses in pathology, bacteriology, morbid histology, and neuro-pathology have been arranged for the ensuing summer term. The courses will commence on the first week in May and will be delivered by Dr. J. H. Abram, Dr. W. B. Warrington, and Dr. Grünbaum. The fees charged for the courses on bacteriology and morbid histology will be two guineas each and for neuro-pathology one guinea. A fee of four guineas will be charged for all three courses. The course in bacteriology will include methods of investigation as applied to diagnosis; that in morbid histology methods of preparations and a study of the more common morbid conditions; and that in neuro-pathology the methods of investigation and the etiology, anatomy, and diagnosis of common nervous diseases.

Mr. Mitchell Banks, F.R.C.S. Eng., LL.D.

The news of the honour conferred on Mr. Mitchell Banks, Emeritus Professor of Anatomy, University College, Liverpool, by the University of Edinburgh giving him the honorary degree of LL.D. at the Spring Graduation ceremonial has been received with much gratification in Liverpool, where Mr. Banks's ability and high qualities are fully recognised. In the department of surgery Mr. Banks has attained a pre-eminent position as practitioner, teacher, and writer. But more important, if possible, than his contributions to scientific surgery is the work which he has achieved as a pioneer and harbinger of medical education in Liverpool. To his efforts in a large measure have been due the calling into existence of the Liverpool School of Medicine which is now in such a flourishing condition. He has represented the Victoria University on the General Medical Council and has received every honour which the medical profession in Liverpool could accord to him. Mr. Banks is an Edinburgh graduate in medicine and, to quote the terms of recommendation used by Sir Ludovic Grant, the dean of the faculty of law in the University of Edinburgh, his career has reflected lustre upon the Edinburgh School of Medicine.

Liverpool Queen Victoria District Nursing Association.

The committee of this association have made arrangements for a small staff (which will be increased if necessary) of trained nurses who will make daily visits as required, or attend operations, &c., on payment of from 7*s.* 6*d.* to 10*s.* 6*d.* for one daily visit or from 10*s.* to 20*s.* for two daily visits, according to the time occupied in each case. Moderate charges are made for assistance at operations and for laying out the dead. There is also a scale of charges for one whole day or one whole night visit. A fee of 2*s.* 6*d.* is charged for a single visit. These nurses are quite distinct from the district nurses, whose services, being entirely gratuitous, are intended only for the sick who cannot afford any payment. The scale of fees has been arranged as low as is consistent with the maintenance of the staff in a thoroughly efficient state. The committee have purchased a commodious house in Prince's-road which will serve as the central home. The neighbourhood is highly respectable and its surroundings are very healthy.

Health of Liverpool.

Influenza is still prevalent in Liverpool, although there is a diminution as compared with the few preceding weeks. Amongst the cases under treatment at the city hospitals last week were 267 of scarlet fever, 52 of typhoid fever, and 20 of diphtheria. The death-rate is considerably lower than at this time last year. A wholesome rule prevails at this period of the year when owners of small property receive notices to whitewash the exterior of court houses found to be in a filthy state—the medical officer is placed in a position to take legal proceedings when his notices to that effect are disregarded.

April 25th.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

Health of Edinburgh: Medical Officer's Annual Report.

SIR HENRY LITTLEJOHN, medical officer of health of the city of Edinburgh, has recently issued a long and interesting report on the health of the city during 1898. The population of the city for the year is estimated at 295,628, an increase of 3264 on the previous year. Since the census of 1891 there was an increase in the number of inhabited houses amounting to 10,866. The birth-rate during the year was 27·38 per 1000. The birth-rate in Glasgow, Greenock, Aberdeen, Leith, and Dundee was higher than that of Edinburgh. Greenock headed the list with a birth-rate of 35·2. The percentage of illegitimate to total births in the eight principal towns stood at the following rates: Dundee, 9·2; Aberdeen, 8·7; Edinburgh, 7·4; Perth, 7·3; Glasgow, 6·4; Paisley, 5·9; Greenock, 5·2; and Leith, 4·9 per cent. The death-rate per 1000 of the population was 19·6, but this figure can hardly be taken as the death-rate of the city, as it is seen from the statistical tables appended that of the 1521 deaths which occurred in the public institutions 377 were those of persons not usually resident in Edinburgh, while among the deaths occurring throughout the city 95 were those of temporary residents. The year was to be regarded as a favourable one both as regards climatic conditions and freedom from any excessive mortality from zymotic diseases. As regarded the housing of the poor much had been done in recent years, but there were still many areas demanding reconstruction; on two of these, Simon-square and Greenside, he had already reported to the Town Council. Examining the death-rate in children it was seen that of the total of 5320 deaths 1805 occurred among children under five years of age, and of these 1140 were those of children under the age of one year—that is to say, 140 children died under the age of one year to every 1000 born. This mortality was largely preventable, as it was in large part due to neglect on the part of the mothers or to injudicious feeding. As so many deaths in children occurred from the sequelæ of zymotic diseases he thought that it might be of advantage to distribute a handbill to all families where these diseases

existed, pointing out any special precautions which were advisable. The causes of death in the city were as follows: measles, 134 deaths; scarlet fever, 72 deaths; typhus fever, 9 deaths; whooping cough, 124 deaths; diphtheria and membranous croup, 38 deaths; enteric fever, 27 deaths; influenza, 93 deaths; diarrhœa, 104 deaths; cancer, 267 deaths; tuberculous diseases, 762 deaths; diseases of the nervous system, 631 deaths; diseases of the circulatory system, 569 deaths; diseases of the respiratory system, 929 deaths; premature birth, 167 deaths; old age, 253 deaths; and accidents, 135 deaths.

The records of the notification of infectious diseases during recent years tended to show that a marked reduction had taken place in the prevalence of enteric and typhus fevers in the last 10 years. This could not, however, be said with regard to diphtheria, scarlet fever, and measles. After freedom from small-pox for two years seven cases had occurred in 1898. The infection had been primarily brought by a sailor from Bordeaux and all the seven cases were traced to this source. One patient died—a woman, aged 60 years, who had not been vaccinated. An epidemic of typhus fever had occurred during the year, resulting in 79 cases with nine deaths. The source of infection could not be stated with certainty, but suspicion attached to a "wake" which was held in September in a small, dark, dirty house in connexion with the body of a man who was said to have died from pneumonia; six people at least who were present at this "wake" became ill. In the case of three of these influenza was diagnosed and they were treated at home; the other three were at first supposed to have typhoid fever, but on removal to the City Hospital it was found that they were suffering from typhus fever. The experience of this epidemic had impressed upon Sir Henry Littlejohn: (1) that typhus fever is as virulent as in the former epidemics; (2) that isolation in hospital is necessary; (3) that persons in close contact with the patient should be kept in quarantine for at least 14 days; and (4) that typhus fever is non-infective at moderate distances, only those who have been in intimate contact with the patient being infected. The disease had not been observed to spread through tenements, even when a case had occurred in a crowded building, except when the neighbours had been visiting the patient.

Edinburgh Institution for the Relief of Incurables.

The annual general meeting of the subscribers to the Institution for the Relief of Incurables in their own homes was held in Edinburgh on April 21st, Dr. James Andrew, President of the Royal College of Physicians of Edinburgh, being in the chair. 65 vacancies had occurred during the year on the annuity list which had been filled up by the directors after careful examination of 229 applications. The number of annuities was therefore 540, the same as last year, each of them amounting to £2 quarterly. The subscriptions for 1898 amounted to £2041 0*s.* 4*d.*, being an increase of £80 14*s.* 10*d.* over 1897.

Pharmaceutical Society of Great Britain.

At a meeting of the executive of the North British branch of the Pharmaceutical Society of Great Britain held in Edinburgh on April 21st it was unanimously agreed "that this executive cordially approves of the action of the council in taking steps to oppose the Lord Chancellor's Bill, 1899, and resolves to use every endeavour to assist the council in their action."

The Question of Lunatic Asylums in Forfarshire.

On April 21st a special meeting of the Forfar District Lunacy Board was held in Dundee, the subject under consideration being the decision of the General Board of Lunacy to erect Dundee Parish Council into a separate lunacy district. After considerable discussion, in the course of which the chairman, Colonel Rait, stated that only two courses were open to them, either to acquiesce or to appeal to the Secretary of State for Scotland, the clerk, Sir Thomas Thornton, said the result of the decision by the general board would be to compel the parish council to erect a new asylum and to assess Dundee for it, which assessment would amount to 1*s.* in the £. Another member of the board, however, asserted that instead of an increase there would be a reduction of 2*s.* 6*d.* in the assessment. Finally, it was decided by four votes against two to appeal against the order to the Secretary of State for Scotland.

Interment of Surgeon-Major-General Webb.

On the afternoon of April 22nd the remains of Surgeon-Major-General William Marshall Webb, late of the Army Medical Staff, were interred in the Dean Cemetery, Edinburgh. Surgeon-Major-General Webb died in Cairo on March 18th and the body had been embalmed and brought to Edinburgh. Deceased resided in Edinburgh twelve years ago when he filled the office of deputy-surgeon-general for Scotland. Among those attending the interment were Surgeon-General Sir A. Christison, Bart., Surgeon-Major-General Turnbull, Surgeon-Colonel Moir, Surgeon-Colonel Arnott, and Major Mitchell, R.A.M.C.

The Will of the late Sir John Struthers.

The will of the late Sir John Struthers, Emeritus Professor of Anatomy in the University of Aberdeen, has now been made public. The trustees are his wife, Lady Struthers, Dr. Alexander Bruce, Edinburgh, and Mr. G. Villiers Mann, S.S.C., Leith. By a codicil dated Feb. 20th, 1899, the following bequests were made: 1. To the Royal College of Surgeons, Edinburgh, the sum of £500, "for the purpose of promoting anatomical science" by the foundation of a lecture to be delivered every third year before the College. The lecture might be on any part of normal anatomy, naked-eye or microscopic, or on any subject in comparative anatomy within the vertebrata. It might consist of original work not already published or of an account of the progress of anatomical science within a period, or of the history of anatomy in some particular place. The lecturer must be chosen by the President's Council at least a year before the lecture was to be delivered. He might belong to any country or profession, but must have done original work in the above-named branches of anatomy. The money was to be invested as a special fund and the interest to be given to the lecturer as an honorarium. The lecturer should be bound to publish the lecture or a full abstract of it in some British periodical. 2. To the University of Edinburgh his stock of anatomical drawings except such as his son might wish to retain. Many of them were by his own hand, in the making of which he had had much pleasure over many years. 3. To the Edinburgh Royal Infirmary the sum of £100 as a slight recognition of the benefit he had derived from his connexion with the old Royal Infirmary where between 1842 and 1863 he had been a dresser, non-resident surgical clerk, house physician, house surgeon, assistant surgeon, and junior ordinary surgeon, and in recognition of the pleasure he had had since returning to Edinburgh in sitting on the board of management of the Royal Infirmary. 4. To the University of Glasgow the sum of £500 for the purpose of founding an award in anatomy to encourage original research or special practical work. The prize was to be awarded for the best original work or for the best special dissection or preparation relating to any part of human or comparative anatomy, the decision to rest with the Professor of Anatomy. The award was to be made every second year and the Professor of Anatomy was to have it in his power to withhold the award in any year in which the work given in was not in his opinion such as to merit the award. The award was to take the form of a gold medal with a money prize. The award was to be open to all students or graduates of the University of Glasgow who were attending or had at any time attended the practical anatomy class of the University of Glasgow. Any dissections or preparations for which the award had been made were to belong to the anatomical museum of the University labeled with the name of the person by whom they had been made. The award was to be also open to women students of Queen Margaret's College.

Edinburgh Royal Infirmary.

At a meeting of the managers of the Edinburgh Royal Infirmary held on April 24th the superintendent presented his half-yearly report. In this report he stated that the operating theatre for the junior surgeon had now been completed and was a commodious, well-lighted, and well-heated theatre, thoroughly equipped and up-to-date, with subsidiary rooms attached. The erection of the new pavilion was progressing steadily. Several faulty points in connexion with the drainage of the pathological department had been put right. The experiment had been tried of providing a home of rest for nurses who were not actually ill but were in need of rest and change of air. For this purpose they had taken a house for a few months at North Berwick. The experiment had proved so successful that they had resolved to establish a permanent home at a shorter distance from Edinburgh. There was a decrease of £40 in the cost of

electric lighting and £17 of this decrease was due to its having been more carefully used.

Edinburgh Parish Council.

At a meeting of the Edinburgh Parish Council held on April 24th it was resolved by a majority of one vote that a deputation of the council should wait on the General Lunacy Board of Scotland to urge the claims of the parish council to have all the members of the parish council formed as the Edinburgh District Lunacy Board, as had been done in the case of other large towns in Scotland.

April 25th.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

The Trained Nurses Question.

THE county infirmary authorities object to the new rule laid down by the Local Government Board that a trained nurse means a person who has resided for not less than two years in a clinical or other hospital recognised by the Local Government Board and who after an examination has obtained from such hospital a certificate of proficiency in nursing. They will not accept the certificate of the authorities or staff of any hospital except a clinical hospital recognised by the examining bodies in Ireland, England, or Scotland unless the non-clinical hospital has at least 150 beds and unless due provision is made for giving the probationer nurse a course of training in the nursing of cases of infectious diseases. It is against this hard and fast rule, which practically restricts the training of nurses recognised by the Local Government Board to three or four institutions in Ireland, that many of the county infirmaries have protested. The governors of the Londonderry Infirmary and those of the Downpatrick Infirmary Board asked that the officials of the Local Government Board should inspect their arrangements with a view to their being recognised, but the authorities of the former, at their meeting on April 19th, were informed that they declined to rescind their rule. They will recognise a nurse trained elsewhere as eligible for appointment as nurse in a Poor-law union hospital, but the Local Government Board will not recognise her as a trained nurse within the meaning of the Local Government Act—that is, a nurse the half of whose salary would be recouped by the Local Government Board.

The Prevention and Treatment of Tuberculosis.

Those members of the medical profession in Belfast who had grave doubts about the propriety of lecturing a mixed audience (lay and medical) on such a purely medical subject as "The Prevention and Treatment of Tuberculosis," feel that what has subsequently occurred has more than justified their fears. Ever since Sir William Broadbent's visit the lay press is being filled with letters, some indeed of a most absurd nature, on the treatment of consumption. Mr. James Arthur Gibson who has gained some notoriety by writing articles on the Nordrach treatment in the *Nineteenth Century* where, it seems, 95 per cent. of all cases of consumption without any selection are, according to the local press, cured, has a letter in the Belfast papers which must be interesting reading to those who took part in the recent meeting there. He says that a sanatorium to be successful must be run on sound lines and be put in charge of a thoroughly competent, specially trained (I suppose only at Nordrach?) medical man. "Even Sir William Broadbent himself would not be fitted to take charge of a sanatorium until he had obtained that practical knowledge of the treatment which is so necessary." "One of the best known men in the medical world of Scotland now discredits the new treatment because he failed to get results at a consumption hospital with which he was at one time connected and at which they carried out a half-hearted 'open-air' system. He says that the great majority of the patients died, and naturally, for, to begin with, the doctor did not know his work practically, and in the next place he left the patients to their own devices while he himself went to look after his private practice. No results worthy the name could be got under such circumstances." It is very sad to find that "one of the best known men in the medical world of Scotland," just as one of the most distinguished of his English *confrères* (Sir William Broadbent), is deficient, according to Mr. Gibson, in the practical knowledge of his work. Having such a thorough contempt for Scotch and English medical opinion on the treatment of consumption it is very hard to find that Mr. Gibson has no better opinion of the medical men of his own country. He says of the Consumption Hospital in Belfast: "It is the same with your Forster Green Hospital, where you have a hospital run by two or three doctors, who are in private practice and who each perhaps has his own idea of treatment and sees his patients but once a week; you cannot expect to get results; it would be unfair to ask for results of a permanent character. At the Forster Green Hospital I could see little that was right except the house and the grounds. These are all that could be desired, and what remains to make it as good a sanatorium as need be is but to have a practically trained doctor at the head of the establishment to regulate all its affairs and to give his life solely to that work. If such were the case cured consumptives from the Forster Green Hospital would soon be dropping in on their astonished friends." Such writing is little short of impertinence. Does Mr. Gibson imagine that medical men in Belfast who have visited continental sanatoria (not one, but many), and who have sent patients there and who are carrying out the treatment in Belfast, are not able to observe and draw conclusions for themselves? Some of them of the greatest experience—seeing that the results even at these continental sanatoria are unfortunately by no means so brilliant as Mr. Gibson states, for they, alas, know the after histories of their patients—feel that the time has not yet come to pronounce a decisive opinion on the value of sanatoria treatment. There can be no question that fresh air, sunlight, and nourishing food are of the utmost value in the treatment of consumption, combined with regular habits as to food, sleep, &c. The question of exercise is a debateable one. But to tell us that the type of treatment as carried out at one particular sanatorium is the only one is pure quackery; and to lead unfortunate consumptives to imagine that 95 out of every 100 of them can be cured by going to that or to any other sanatorium is contrary to all medical experience. There is undoubtedly a good deal in the open-air treatment of consumption, but the way it is being at present "boomed" by people with ready pens but with no medical training is calculated to make men who are accustomed to look at things from a scientific standpoint rather critical. The question is still *sub judice* and dogmatism at present is foolish and convinces no one. We must wait for further experience.

Medical Libel Case.

On April 20th and 21st, at the Four Courts, Dublin, before the Lord Chief Baron and a special jury, the libel action of Thompson *v.* Falls was tried. The plaintiff was Dr. Thompson, surgeon to the Tyrone County Infirmary, while the defendant was a solicitor practising in Enniskillen, county Fermanagh. The action was brought to recover damages laid at £2000 for alleged libel. Dr. Thompson was examined in July, 1896, as a medical witness on behalf of prisoners in the case of the Queen *v.* James and Thomas Maguire who were charged with the murder of a man named Funston. The trial took place in Omagh, the jury disagreed, and the prisoners were again tried at the Ulster winter assizes in Belfast, when the plaintiff was examined as a witness for the prisoners, and they were acquitted. The plaintiff (Dr. Thompson) subsequently was a Parliamentary candidate for North Fermanagh when he alleged that on or about Oct. 24th, 1898, at Derrygonnelly, the defendant spoke and published about him the following: "What was he (plaintiff) doing? He went to the Unionists and he said: 'Oh! I am a Unionist, you will support me as against the Nationalists,' and he attempted to get their votes in that way. Then he went to the Nationalists and although he did not say it in so many words these were the grounds on which he came forward. He (meaning plaintiff) said: 'What part did I take in the Maguire trials? Did I not do so and so?' He did not say this in so many words but did he not make political capital out of it. He (Mr. Falls) would be the last man to get up and say a word against any professional man getting up in a court of justice and giving his evidence fairly and justly, but when a man turned himself from a professional witness into an advocate and had to be reproved by the Attorney-General and the Lord Chief Justice (himself a Roman Catholic) for his gross brutality then he saw he was not doing what was right." The plaintiff also complained that the defendant on Nov. 29th spoke and published of him other words, among them—

"I have an opportunity now of eating my words and for apologising for the gross slanders I am said to have spoken;" and he went on to say that he would do nothing of the kind, "but, on the contrary, I am prepared to repeat on this platform everything I said, and, what is more, I prove what I said is true." It was averred that the words complained of meant that the plaintiff was guilty of grave professional misconduct and that, actuated by unworthy motives, he gave wilfully false evidence calculated to defeat the ends of justice. The defendant denied that the words complained of were spoken of the plaintiff in relation to his profession and he also denied that he caused them to be published in newspapers. There was also a plea of no libel and a statement that the words were spoken of the plaintiff as a Parliamentary candidate on a matter of public interest without malice and in the belief that they were true. The defendant was conducting agent for plaintiff's opponent in the Parliamentary election contest. The jury, after a trial lasting two days, found that the Derrygonnelly speech was not a fair comment and assessed £25 damages for it. They considered the other speech a libel and that it imputed gross professional misconduct, damage being fixed at £25 in this instance also. Dr. Thompson has thus had a complete victory on all the points of the case.

Meath Hospital and Co. Dublin Infirmary.

At the annual prize examinations in this institution senior prizes in Clinical Medicine and Surgery were awarded to Mr. Edmund Bennett (gold medal) and Mr. Patrick S. O'Reilly (silver medal). The junior prize went to Mr. Byrne.

The Death of Mr. William Carte, F.R.C.S. Irel.

Mr. William Carte, Surgeon to the Royal Hospital, Kilmainham, died on Monday last, April 24th, at the hospital, to the great regret of a large circle of friends and fellow-citizens. Mr. Carte had occupied his official position for over 40 years and enjoyed a well-earned reputation among his medical colleagues. He was formerly curator of the Museum of the Royal College of Surgeons in Ireland and was a vice-president of that corporation. He was well known in Dublin as a man of sound business capacity and advanced ideas—qualities which he showed in his intimate connexion with some of the largest municipal matters of the city. He had also been assistant surgeon to the 4th Light Dragoons, a member of the Crimean Pathological Board, and was the author of "Climate and Zoology of the Crimea during the campaign, 1854–1856."

April 26th.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

The Treatment of Congenital Torticollis.

AT the meeting of the Academy of Medicine held on April 11th M. Berger showed a child, aged 10 years, the subject of congenital torticollis, scoliosis, and cranial and facial asymmetry. A successful result had been obtained by dividing subcutaneously both the sternal and clavicular attachments of the sterno-mastoid muscle together with massage. The child was born by a breech presentation and a few days after birth a tumour was noticed on the right side of the neck which, however, disappeared little by little although the head remained in a vicious position owing to right torticollis. When M. Berger first examined the child he presented besides the torticollis the following deformities: a diminution in both the vertical and transverse diameters of the face on the right side, an obliquely oval conformation of the skull, a cervical spinal curvature with the convexity towards the left, a dorsal curvature with the convexity towards the right, and a compensatory lumbar curvature with convexity towards the left. M. Berger being a firm believer in the subcutaneous method of section of the sterno-mastoid performed this operation, straightened the head, and kept it in the corrected position for a month by means of a plaster bandage. Afterwards he prescribed exercises which consisted in bending the head laterally until the ear touched the shoulder and in rotating it as far as possible in the opposite direction to that side on which the deformity had existed. The spinal curvatures were treated by repeated pressure, the patient being slung by a Sayre's apparatus. These exercises were repeated at first every day, then every other day, and lastly once a week. The position of the child's head is now quite correct and all movements are easily performed. The spinal curvatures no longer exist and the facial deformity is greatly lessened.

The Assistance Publique.

In the month of December, 1896, the Municipal Council asked the prefectoral administration to prepare an estimate showing the minimum sum necessary for the thorough carrying on of the various departments of the Assistance Publique. M. de Selves has accordingly drawn up a report which will be discussed by the Municipal Council in the course of this session. The Prefect of the Seine divides his report into three headings: (1) new works undertaken; (2) repairs and improvements; (3) renewal of linen, &c. The total amounts to over 72,000,000 fr. and is distributed as follows. 1. New buildings—hospitals for adults: hospitals with 500 beds on the right bank, 7,700,000 fr.; rebuilding the hospital of La Pitié, 500 beds, 5,500,000 fr.; rebuilding and enlarging the Aubervilliers hospital, 6,600,000 fr.; rebuilding and enlarging the Broussais hospital, 5,500,000 fr.; a special hospital on the left bank for skin diseases and syphilis of 1000 beds, 11,000,000 fr.; rebuilding the Broca Hospital, 1,650,000 fr.; total, 37,950,000 fr. 2. Children's hospitals for general diseases: rebuilding and improving a hospital of 376 beds, 3,760,000 fr.; erection outside Paris of a hospital of 200 beds for children suffering from tuberculous bone disease, 1,060,000 fr.; total, 4,820,000 fr. 3. Infirmaries: Brevannes, improvement and construction of a building for 1400 beds, 4,660,000 fr.; La Rochefoucauld, enlargement, 1,000,000 fr.; total, 5,660,000 fr. 4. General prophylaxis against tuberculosis, 4,300,000 fr. 5. General expenses, construction of a central laundry, 2,000,000 fr.; of a central linen store, 500,000 fr.; total, 2,500,000 fr. Repairs and improvements: adults' hospitals, 6,531,000 fr.; children's hospitals, 837,000 fr.; infirmaries, 799,000 fr.; maisons de retraite, 562,000 fr.; sundry expenses, 189,000 fr.; total, 8,918,000 fr. Renewals of linen, 1,500,000 fr.; reserves for unforeseen expenses, 6,414,000 fr.; total, 7,914,000 fr. Grand total, 72,062,000 fr. The adoption of this budget would allow of the establishment of 2810 new beds, of which 1600 would be in infirmaries and 1210 in hospitals. This would be a great advantage to the sick, for at present many beds in the hospitals are occupied by chronic cases owing to want of room in the infirmaries, so that this new scheme would set free a number of beds for acute cases. If the Municipal Council adopts this programme, as probably it will, the Prefect of the Seine will ask for powers to issue bonds to produce the sum of 75,000,000 fr. The expenses and repayment of the loan will be provided for by a special rate.

New Drugs and their Use in Hospitals.

The Assistance Publique has just published a list of drugs which hospital physicians are authorised to prescribe for their hospital patients. Some of these can only be ordered under certain restrictions—that is to say, they can be ordered once after giving notice to the chief medical officer, but if it is wished to repeat the prescription this can only be done through the Drug Committee on the application of the principal medical officer. Among such drugs are bromoform, di-iodoform, orthoform, iodol, jambul, phloroglucine, piperazine, protargol, rubine, and salophen. Some drugs are absolutely forbidden, such as eucaine, acetate of thallium, Koch's tuberculin, and ovarine. It is somewhat curious that essence of fennel is forbidden while essence of cinnamon is allowed.

Nerve Stretching in the Treatment of Varicose Ulcers.

At the meeting of the Society of Biology held on April 15th M. Chipault, encouraged by the success he had met with in treating perforating ulcer by nerve stretching, suggested to the society a new method of treating varicose ulcers by the same process. The treatment consists of two procedures. (1) Nerve stretching. Owing to the position in which a varicose ulcer most commonly occurs the nerve generally involved is the musculo-cutaneous and sometimes also the internal saphenous. In stretching the nerve great care must be taken not to break it, for in a varicose subject the nerves of the legs are particularly friable. (2) The direct treatment of the ulcer. This is effected in two ways. In large ulcers where the surrounding skin is in an unhealthy condition the ulcer is well scraped so as to transform a fœtid wound into a comparatively healthy one. When the ulcer is small it is carefully disinfected and the edges are dissected away and the whole wound is then scraped down to the fascia. The edges of the wound are then approximated by silk sutures.

The elasticity of the skin of the leg is considerable, but time must be given and the sutures tightened gradually. If this be done it will be found that the surgeon can close a wound which at first sight seemed far too large for such a result. Ulcers treated in this way often heal by first intention.

April 25th.

SWITZERLAND.

(FROM OUR OWN CORRESPONDENT.)

Cancer of the Œsophagus.

DR. F. DE QUERVAIN, surgeon to the Chaux de Fonds Hospital, has in a case of deep œsophageal cancer achieved a success which, though only palliative, seems worthy of record. The cancer began at the level of the cricoid cartilage and extended almost to the arch of the aorta. Dr. de Quervain performed gastrostomy to enable the patient to be properly nourished after the removal of the tumour. 10 days later he removed the whole of the tumour together with part of the thyroid gland and the left recurrent nerve already involved, drawing up the distal end of the œsophagus as far as possible and severing unhealthy tissue. The wound was stuffed with gauze and healed without reaction. A pharyngeal fistula remains through which saliva is discharged; this is absorbed by some pads changed three times a day. The patient, who was admitted to the hospital on Jan. 9th and was dismissed on Feb. 11th, has taken up his work again as a farmer, and was seen on March 11th in good health and was rapidly gaining weight. Dr. de Quervain is a young surgeon of the Bernese school of Kocher.

Antitoxin Treatment of Tetanus.

Dr. E. Tavel of the Bacteriological Institute of Berne reports on 12 cases of tetanus treated with his antitoxin. In the first two successful cases (in 1894) the serum of a dog was used in a strength of from 1,000,000 to 2,000,000. The dog succumbing to some intercurrent illness Dr. Tavel did not succeed till 1897 in obtaining efficacious serum and then from a horse in a strength of from 1,000,000,000 to 2,000,000,000. This serum has kept well and remained efficacious for a year at a time. It has been used in 10 cases by different medical men, the doses varying from one to 16, the cures taking place slowly after some weeks—gradually but surely, in some cases quite remarkably so. Seven of these cases recovered, one of the fatal cases being desperate at the time injections were commenced. This contrasts well with another report of 11 fatal cases out of 13 where antitoxin was not resorted to. The last three cases of Professor Girard and Professor Kocher were interesting on account of the mode of application, the serum being injected into the lateral ventricle of the brain after trephining and in doses of five grammes on several occasions, intravenous injections of from 20 to 50 grammes being also used. Two of these patients recovered. Professor Roux of Lausanne, whose results with intracerebral injections of antitoxin are about to be published, considers the prognosis to be absolutely favourable if the operation is performed quite at the onset of the symptoms.

Zürich, April 24th.

ROME.

(FROM OUR OWN CORRESPONDENT.)

The Congress against Pellagra.

OF the "Seven Plagues of Italy" there is none more pernicious than pellagra or "elephantiasis Italica," a constitutional or blood distemper operating destructively on the integument. What are its causes? If we go deep enough we find them in "miseria" and ignorance to begin with: secondarily, in malnutrition, particularly in that perverted form of alimentation which confines itself to maize and maize alone, oftener than not diseased itself; thirdly and lastly, in dirt or neglect of personal cleanliness and of elementary hygienic laws. That the consumption of maize, and that of an impure kind, to the exclusion of other diet is a main factor in producing pellagra is proved by the circumstance that in the Lombardo-Venetian territory where this is the chief food of the agricultural labourer the disease is mostly to be found, while in Calabria and Sicily where maize is practically unknown no such disease exists. Nay, further, in the Alta Valtellina, much nearer Lombardo-Venetia, pellagra numbers no victims because there there is neither cultivation nor consumption of maize; but in the Valtellina Bassa where there are both the disease is painfully in evidence. About 17 years ago an enlightened and vigorous effort was made in Milan to come to close quarters with pellagra—its cause, its cure, and its prevention—and a committee of 38 members, chiefly medical, went thoroughly into the problem. Eight years' study on the part of these gentlemen culminated in at least one practical step—the institution of the "Pellagrosario," or home for children inheriting the pellagrose cachexia or in the first stage of the disease, and, thanks to royal and local munificence, in 1890 the first "pellagrosario" was erected on a site at Inzago, some 15 miles from Milan. Previously to this the means of encountering the malady were the "locande sanitarie," or sanitary dispensaries, with "forni co-operativi" (coöperative bakeries) and cheap kitchens where food of a varied, sound, and sustaining kind was doled out to the sufferers. This, however, did little more than alleviate the symptoms of a malady already established, while chronic cases of an aggravated type were sent to hospital and the worst cases of all, those afflicted with pellagromania, were accommodated in asylums as on the whole the preferable course to letting them commit suicide by *sus. per coll.* on the handiest tree or by taking a header into the nearest pool. The committee wisely concentrated its remedial efforts on the rising generation which had still a chance of rescue from the depraved conditions of their nutrition with the inevitable sequelæ of mental hebetude, melancholic tendency, and general apathy towards the cleanly virtues. "Remove these incipient victims," practically said the committee, "from their deteriorating surroundings; wash, feed, and clothe them well; educate them so as to rouse their minds and to make them the intelligent custodians of their own health, so that on their return to their families they may have an enlightening and salutary influence on their brothers and sisters or even parents, and so induce the atmosphere in which neglect of sanitary law does not thrive." All this the "Pellagrosario d'Inzago" endeavours to achieve, and with what results? Of the Milanese communes 96 sent "pellagrosi" between 12 and 22 years of age to Inzago—277 males and 275 females. After treatment extending over a series of months 238 of the former and 250 of the latter have returned home cured; others, including 80 sent during the last statistical year, are still under observation. In that year 40 girls were admitted in the months of October, November, and December, and 40 boys during January, February, and March. The former, besides reading and writing, were instructed in special knowledge necessary for the agricultural labourer; the latter, in addition to the above, were taught some of the main principles of husbandry; and both girls as well as boys were exercised in suitable manual work, indoors and outdoors. 60 per cent. came in "analfabeti" (unlettered). Not one went out unable to write his or her name. Much of this gratifying result is attributed to the skill, the energy, and the perseverance of the director of the Istituto d'Inzago, Dr. Giuseppe Friz and the three excellent "Suore" (sisters) of the Adoratrici della Rivolta d'Adda who carry out his instructions. Meanwhile, the example afforded by the Institute cannot but fructify ere long in the multiplication of others in the pellagrose districts. Sanguine anticipation in this direction was afforded at the Congresso contro la Pellagra recently held at Padua. A paper read by Dr. Iginio Sormani of Milan on "Pellagrosario o Locande Sanitarie?" once more put in evidence the superiority of the Inzago Institute to the preceding practice, but dwelt with much cogency on the fact that not till the peasantry are educated out of their superstitious reverence for tradition and their misgivings as to hygienic innovation will even Inzago have its fair chance or its normal effect. Others of the "congressisti" (Dr. Ceresoli of Brescia, Professor Rezzara of Bergamo, and Dr. Brunati of Como) made valuable contributions to the better understanding of the causes of the disease and to the more effective devising of remedial legislation, while Professor Zambroni of Ferrara raised a most profitable discussion on the treatment of "pellagrosi" in infancy. The transactions of the Congress, of which the official publication is announced, will be found to have advanced the solution of the problem in not a few directions, but the grand difficulty in all Italian reforms—the economic question—still throws its sombre shadow over

this and similar undertakings. It is much, however, to have the terms of the problem clearly defined and the limits of remedial legislation brought home to the collective mind of Italy, and for this indispensable preliminary we have to thank the representative citizens of the Lombard capital—chiefly its medical consultants and its general practitioners.

April 23rd.

Medical News.

SOCIETY OF APOTHECARIES OF LONDON.—In April the following candidates passed in the subjects indicated:—

Surgery.—C. J. Barnes, King's College Hospital; W. F. C. Bennet (Section I.), Sheffield; H. E. Dalby, Charing-cross Hospital; A. G. C. Davies (Section II.), Guy's Hospital; T. S. Elliot (Section I.), London Hospital; H. L. Hands, Madras and Charing-cross Hospital; H. C. Holden, Guy's Hospital; J. J. Huey, Glasgow; W. S. Inman (Sections I. and II.), Sheffield; J. W. Robertson, Kingston, Ontario; W. Sisam (Section I.), Birmingham; S. Sugden, Manchester and St. Mary's Hospital; L. L. G. Thorpe, University College Hospital; and W. H. Willcox, St. Mary's Hospital.

Medicine.—J. M. Anderson, Aberdeen and Middlesex Hospital; F. W. Chesnaye (Section II.), St. George's Hospital; J. T. Davies (Sections I. and II.) and H. S. A. Davies (Section II.), Michigan; W. J. Evans and H. Greenwood, London Hospital; W. Hickey (Section I.), Manchester; W. St. G. G. Hill, St. Mary's Hospital; G. C. Hobbs (Section I.), St. Bartholomew's Hospital; W. S. Inman (Sections I. and II.), Sheffield; L. Liebster, Vienna and London Hospital; W. P. R. Newth, St. Thomas's Hospital; H. J. Pickering (Section I.), St. Bartholomew's Hospital; A. H. Safford, King's College Hospital; W. Sisam (Section I.), Birmingham; L. K. Tickner, Durham; and J. M. Twentyman, Cambridge and King's College Hospital.

Forensic Medicine.—J. M. Anderson, Aberdeen and Middlesex Hospital; C. F. W. Dunn, Cambridge and Middlesex Hospital; W. J. Evans, London Hospital; T. R. Griffiths, University College Hospital; W. Hickey, Manchester; W. St. G. G. Hill, St. Mary's Hospital; G. C. Hobbs, St. Bartholomew's Hospital; W. S. Inman, Sheffield; E. P. Marett, St. Thomas's Hospital; G. S. Moore, London Hospital; H. J. Pickering, St. Bartholomew's Hospital; J. W. Robertson, Kingston, Ontario; A. H. Safford, King's College Hospital; W. Sisam, Birmingham; J. Thompson, Belfast; J. M. Twentyman, Cambridge and King's College Hospital; and E. D. Wortley, St. Bartholomew's Hospital.

Midwifery.—G. Aldridge, London Hospital; C. J. Coleman, Cambridge and Birmingham; A. B. Dunne, Cambridge and Leeds; E. L. Gowlland, St. Mary's Hospital; H. M. Hardy, Guy's Hospital; J. E. Howroyd, Leeds; W. S. Inman, Sheffield; O. E. Lemin, London Hospital; B. S. O. Maunsell, St. Bartholomew's Hospital; W. E. Maw and T. C. Mitchell, Leeds; G. S. Moore, London Hospital; S. Page, Birmingham; and A. C. S. Waters, St. Bartholomew's Hospital.

The diploma of the Society was granted to the following candidates, entitling them to practise medicine, surgery, and midwifery:—C. J. Barnes, C. J. Coleman, H. E. Dalby, A. G. C. Davies, H. L. Hands, J. J. Huey, W. S. Inman, L. Liebster, E. P. Marett, A. H. Safford, and S. Sugden.

UNIVERSITY OF DURHAM.—At the Second Examination for the degree of Bachelor in Medicine held at the College of Medicine, Newcastle-upon-Tyne, in April, 1899, the following candidates satisfied the examiners:—

Anatomy, Physiology, and Materia Medica.—Second-class Honours: Vincent Blumhardt Nesfield, St. Mary's Hospital; and William Greenwell Robson, College of Medicine, Newcastle-upon-Tyne. Pass List: Anthony Bourchier Bradford, St. Thomas's Hospital; Mary Evelyn de Rusett, College of Medicine, Newcastle-upon-Tyne; Alice Maud Dodd and Mary Jane D'Vaz, London School of Medicine for Women; Letitia Nora Ede, College of Medicine, Newcastle-upon-Tyne; Henry Wallace Furnivall, University College, London; James Alfred Giles, College of Medicine, Newcastle-upon-Tyne; Chella Mary Hankin and Katharine Mary Helen Hawkins, London School of Medicine for Women; William Curling Hayward, M.R.C.S., L.R.C.P., Charing-cross Hospital; Guy Hannah Kirby, Mason College, Birmingham; Hugh Robert Kendal, Kenred Manson, Leonard Montgomery Markham, Leonard Clark Newton, Ernest Edward Norman, Hermann Heinrich Ruffmann, and David Rees Roberts, College of Medicine, Newcastle-upon-Tyne; Carl Anders Ryman, St. George's Hospital; and Hugh Widdas, Frederick George Wilson, and Thomas Wilson, College of Medicine, Newcastle-upon-Tyne.

UNIVERSITY OF CAMBRIDGE.—In April the following candidates satisfied the examiners in both parts of the examination for the Diploma of Public Health:—

Thomas William Naylor Barlow, Hugh Howie Borland, Stanley Copley, Arthur Edward Druitt, William Francis Grant, John Charles White Halliday, Elias Francis Harwood, George Frederick McCleary, John Middleton Martin, Ernest William Gurney Masterman, Patrick Murison, Arthur Augustus Mussen, James Thomas Charles Nash, Edward Llewelyn Parry-Edwards, Benjamin Lewis Paton, Arthur Maxwell Nicholson Pringle, Harry James Spon, Claud Martin Vernon, and Ethel Mary Nucella Williams.

DIPHTHERIA AT ABERDARE.—At the meeting of the Aberdare Urban District Council held on April 21st Mr. D. Davies stated that since Jan. 1st there had been 705 cases of diphtheria notified to him.

NEW SEAMEN'S HOSPITAL FOR CARDIFF.—A special meeting of the Cardiff Seamen's Hospital committee was held on April 18th, when it was stated that a balance of £4250 remained to be collected before July 26th next.

ROYAL ALBERT HOSPITAL, DEVONPORT.—A successful bazaar in aid of the funds of the Royal Albert Hospital was recently opened at the institution by Lady St. Levan. The Prince and Princess of Wales, as patron and patroness of the hospital, sent some choice flowers from Sandringham. The proceeds of the first day amounted to £200.

SUCCESSFUL VACCINATION.—Mr. F. N. Williams, public vaccinator of Brentford, has been awarded by the Local Government Board the sum of £13 11*s.* for successful vaccination in his district.—Awards have also been granted by the Local Government Board for successful public vaccination to Dr. James A. B. Thompson of the Fourth District of the Ongar Union and to Dr. J. R. White of the Second District of the same union.

LITERARY INTELLIGENCE.—Messrs. Cassell and Company, Limited, announce the early publication of a new text-book on Orthopædic Surgery by Mr. Jackson Clarke. The work is to consist of about 300 demy octavo pages and will be fully illustrated. Besides furnishing a text-book on the subject it has been the author's aim to embody the many advances, including the Roentgen-ray process, which have been recently made in the department of surgery with which it deals. A special feature of the book is to be an exposition of the pathology of deformities as a basis of orthopædic surgery.

ASSOCIATION OF REGISTERED MEDICAL WOMEN.—The April meeting of this association was held on April 11th in the library of the association, New Hospital for Women, Mrs. Stanley Boyd, M.D. Brux., Vice-President of the association, being in the chair.—Miss Traill Christie, M.B., B.S. Lond., late officer on plague duty in India, read a paper on the Various Methods for the Prevention of the Spread of Plague which have been adopted from the time of the sixth century till now. Miss Christie spoke specially about the methods and result of inoculation against plague, as she had been connected with that branch of the work.—Miss Sharpe, L.R.C.P. & S. Edin., showed a case of Lupus of the Nose and Throat treated by x rays. The growth on the nose had disappeared after 24 applications and the throat had greatly improved after 12.—Miss Sharpe also read a paper on X-ray Therapeutics and mentioned another case of lupus under her care which was still under treatment and making satisfactory progress.

QUEEN'S COLLEGE, BELFAST.—The following is the list of class prizes in the Faculty of Medicine at the close of the winter session, 1898–99:—Zoology: Senior—James Herbert Moore. Junior—Joseph Clarke M'Pherson, Ernest Marcus Henry Milligan, Thomas Lyle, David John Carlisle, and George Baird Moffett (equal). Chemistry: Senior—Reginald Thornton Lloyd. Junior—Ernest Marcus Henry Milligan and Thomas Lyle. Practical Chemistry: Senior—Robert James Bethune and John M'Clatchey. Junior—Alexander Dick, Hugh John Forbes, and Thomas Dixon Liddle (equal). Chemical Laboratory: Thomas Bernard Vinycomb. Systematic Anatomy: Senior—David M'Mordie, B.A. Junior—Henry Mulrea Johnston, William Henry Norman Bright, and John M'Clatchey. Practical Anatomy: Third year—John Henry Gill and David M'Mordie, B.A. (equal), and Hugh Moreland M'Crea. Second year—Walter Phillips and Robert Alexander Stewart (equal), and Sydney Herbert George Blakely. First year—James William Herbert Babington, Thomas Killen, and William Henry Norman Bright. Physiology and Histology: Senior—David M'Mordie, B.A., Samuel Robert Hunter, and Albert Lytle Black. Junior—Henry Mulrea Johnston. Practical Histology: James Graham Campbell, John Stewart Ferguson Weir, and James Edwin Wilson. Medicine: William John Hogg and David Milliken. Surgery: Thomas Gray, Thomas Stratford Logan, and Robert Matthewson. Materia Medica: Samuel M'Clure and William John Brereton Fergus. Midwifery, Gynæcology, and Diseases of Children: Marion Braidfoot Andrews and Hugh Barkley Steen (equal), Thomas Gray, and Joseph Stewart. Ophthalmology and Otology: John Campbell Rankin, John Elder MacIlwaine, and John Edmund Clements.

X RAY WORK AT CHARING-CROSS HOSPITAL.—At this institution Mr. Mackenzie Davidson has undertaken to give a course of six demonstrations in practical Roentgen ray work from 10 A.M. to noon on Wednesdays, commencing on May 10th. It is not easy to demonstrate x ray results to a large audience, so that the class will necessarily be limited, the maximum number decided upon being 24.

ROYAL FREE HOSPITAL.—A meeting on behalf of the Buildings Improvement Fund of the Royal Free Hospital, Gray's Inn-road, was held on April 25th at the Mansion House. The chair was occupied by the Lord Mayor who stated that the hospital authorities appealed for the sum of £8500 in order to enable them to carry out urgently required structural improvements in the wards and nursing quarters. After an exposition of the hospital's pecuniary position his Lordship moved: "That this meeting appreciating the valuable aid rendered to the sick poor of London by the Royal Free Hospital pledges itself to use every endeavour to assist in obtaining the necessary funds to enable the Committee to carry out the structural improvements needed in the wards and nurses' quarters, and thereby render the institution more efficient for its beneficent work." Sir Henry Burdett, K.C.B., seconded the resolution and testified to the admirable work done at the Royal Free Hospital. Dr. Harrington Sainsbury, Mr. Albert G. Sandeman, Mrs. Garrett Anderson, M.D. Paris, Mrs. Scharlieb, M.D. Lond., Mr. E. Ford North (a former chairman of the weekly board), and Captain Jessel, M.P., also urged the importance of raising the amount required. Before the close of the meeting Mr. Conrad W. Thies, the secretary, announced that the contributions so far received amounted to about £4200. A vote of thanks to the Lord Mayor brought the proceedings to a close.

DIPHTHERIA IN LONDON.—In the four weeks ended on March 25th the amount of diphtheria in London was substantially less than in the like period ended on Feb. 25th, but the deaths were more numerous and the case mortality was consequently higher. In the February period 957 cases were notified, as compared with 791 in the March period, the respective weekly averages being 239 and 198. In February all districts save one were invaded; in March all save two. In February there were five districts in each of which upwards of 50 cases were notified, the aggregate being 365, while in March only four districts had each upwards of 50 notified cases, with 240 in all, other four districts having eight as a grand total. The deaths registered in the February period were 160 in number, or 37 weekly, and the case mortality yielded was 15·6 per cent.; but in the March period the registered deaths rose to 166, or 46 per week, and the case mortality was 20·0 per cent. In the several weeks of the March period the deaths registered were respectively 10 above, one below, five above, and three below the corrected decennial averages for the corresponding weeks of 1889-98. Had the total of the averages been recorded this year the aggregate number of deaths would have been 155 in place of the 166 which were recorded. In the Outer Circle the total of 70 deaths in the February period gave place to 58 in the March period, the several weeks yielding 19, 14, nine, and 16, or an average of 14 in March, and nine, six, two, and six, or 23 in all, belonging to West Ham registration district, as against 38 in the preceding period.

PRESENTATIONS TO MEDICAL MEN.—Mr. John Roberts Thomson, M.D., L.R.C.S. Edin., F.R.C.P. Lond., of Bournemouth, was recently the recipient of a testimonial. 12 months since he met with a serious bicycle accident which has until lately more or less incapacitated him from following with his usual activity many occupations outside his profession. He has been a resident in Bournemouth for a long period and is held in high esteem by the inhabitants. The testimonial is a token of sympathy, for on the anniversary of his accident on April 6th he received a parcel by post which contained bank-notes amounting to £1081. In the parcel was also a beautifully bound album, bearing the monogram "J. R. T." The money is to be applied to the endowment of a ward bearing his name in the Royal Victoria Hospital, an institution in which he has always taken a deep interest. It may be stated that the testimonial was subscribed for secretly and represents all classes of residents in the borough.—The members of the Bugle (Cornwall) Branch of the St. John Ambulance Association have presented Mr. Archibald Shaw, M.D., C.M. Glasg., with a pair of carvers in a suitably inscribed case as a mark of appreciation for his services as honorary instructor of the class.—Mr. W. M. Sturrock, M.B., C.M. Edin., who for the last 12 years has held the appointment of assistant medical officer at St. Pancras Workhouse and Infirmary, was presented on April 21st by the officers of the establishment with a dressing-case and a cheque as a mark of esteem and regard on his leaving the service of the St. Pancras Guardians. He had also previously been the recipient of a dining-room clock, the gift of patients and other inmates, with all of whom he was very popular.

Parliamentary Intelligence.

NOTES ON CURRENT TOPICS.

The Lunacy Bill.

WHEN the Lunacy Bill was considered in Committee by the House of Lords on April 20th their lordships struck out of the Bill Clause 21 which enacted that the visiting committee of every asylum should grant superannuation allowances to such of its officers and servants as were engaged in the care or treatment of lunatics, and that it should be the duty of the county council to confirm the allowances so made. The clause was objected to as an undue interference with count councils.

The Case of Mr. Lamont.

On April 25th Sir CHARLES CAMERON called attention to the case of Mr. Lamont whose arrest upon a charge of issuing false vaccination certificates and subsequent acquittal were commented upon recently in THE LANCET.—The LORD ADVOCATE was unable to hold out hopes that the Treasury would pay any compensation to Mr. Lamont.

HOUSE OF COMMONS.

THURSDAY, APRIL 20TH.

The Treatment of Inebriates.

Sir M. WHITE RIDLEY, in reply to Mr. PICKERSGILL, stated that three inebriate reformatories had been certified. No local authority had yet established a reformatory, but several were to his knowledge actively considering the question which, he need scarcely point out, was not one which could be settled in a day. He was confident that magistrates would not as a rule commit persons under the Act until they knew that provision existed for their reception into a reformatory. No State inebriate reformatory had been established. All the institutions already certified were with one exception willing to receive persons committed under Section 1 of the Act.

The Legal Flash Point in India.

Lord GEORGE HAMILTON, in answer to Sir EDWARD HILL, said that the Act with reference to petroleum passed by the Indian Government in February last was mainly a consolidation Act but with important amendments. The legal flash point was 76° close test, but a cargo of petroleum or petroleum held by dealers was allowed if the samples selected from such petroleum had their flashing points on an average at or above 73° and if not one of these samples had its flashing point below 70°. A despatch from the Government of India, dated Simla, April 24th, 1895, stated that after a full inquiry the legal flash point was found to be satisfactory. The despatch concluded as follows: "The reports which we have now received show that there have been a few lamp accidents, but their occurrence does not appear to us to justify the raising of the present legal minimum flash point and we see no reason for modifying the opinion previously formed by us in regard to the matter."

Administration of the Vaccination Act.

Mr. BROADHURST asked the President of the Local Government Board whether his attention had been called to the conviction at the Melbourn (Cambridgeshire) petty sessions, on the prosecution of the vaccination officer of the Royston Union, under Section 29 of the Vaccination Act, 1867, of William Bertram Parrish, the defendant having obtained a certificate of exemption under Section 2 of the Vaccination Act, 1898, but which he had failed to deliver to the vaccination officer within seven days of its being granted; and whether he was advised that the mere failure to deliver such certificate to the vaccination officer within the prescribed period rendered it null and void; and, if not, whether he would issue instructions to vaccination officers that where an exemption certificate had been granted and delivered, although such delivery had not been made within the prescribed period, no proceedings should be instituted.—Mr. T. W. RUSSELL, on behalf of Mr. CHAPLIN, replied: I have made inquiry as to the case referred to in the question and I find that the certificate of conscientious objection was not delivered to the vaccination officer until 11 days after it had been granted. I am advised that Section 2 of the Vaccination Act, 1898, only exempts the parent from liability to penalties under the Vaccination Acts if he delivers the certificate to the vaccination officer within seven days after it has been granted. I could not undertake to issue any general instructions to the vaccination officers not to take proceedings in cases in which certificates have been delivered after the time prescribed by the statute.

FRIDAY, APRIL 21ST.

The Sewage Farm at Aldershot.

When the House was in Committee of Supply on the Army Estimates Mr. JEFFREYS raised the question of the sewage farm at Aldershot and the propriety of supplying milk from the farm to the soldiers. The hon. Member said that the town of Aldershot would not have the milk

and he insisted that if it was not good enough for civilians it should not be given to the soldiers.—Dr. FARQUHARSON suggested that an expert of the Local Government Board should be sent down to inquire into the state of things.—Mr. POWELL WILLIAMS, Financial Secretary to the War Office, said that an inquiry would be made by experts and the War Office would be absolutely guided by the result, but while he said that he also said that all that had been done had been in pursuance of the opinion of the Army Sanitary Committee which consisted of gentlemen perfectly qualified to speak with authority on the subject. That committee reported that the milk might properly be supplied to the troops, that the dairy was in perfect sanitary condition, that the cows were clean and healthy, and that there was an abundant supply of pure water.

Medical Service in the Army.

On the vote in Committee of Supply for medical establishments Mr. POWELL WILLIAMS announced that there had recently been a great improvement in the number of candidates for the medical service. They were now able to get two candidates for each vacancy and it was clear, he said, that the action taken by the Secretary of State with regard to this branch of the army was going to have the desired effect.—Colonel WELBY, in the course of a speech of some length, dwelt on the advantages of the old system under which the medical officer was attached to a particular regiment.—Dr. FARQUHARSON, on the other hand, claimed that the old system could not with advantage be re-established.—Captain NORTON and Mr. PIRIE called attention to the insufficiency of nursing arrangements at Cairo and Alexandria after the battle of Omdurman.—Mr. POWELL WILLIAMS defended the department.—Sir WALTER FOSTER described the defence as inadequate and unsatisfactory and insisted that the condition of things both at Cairo and Alexandria would not be tolerated for a moment in a civil hospital.

MONDAY, APRIL 24TH.

Imbecile Children.

Sir JOHN GORST, in answer to a question by Sir U. KAY-SHUTTLEWORTH, said that the Government intended to bring in a Bill to deal with the recommendations respecting feeble-minded and defective children contained in the report of the Departmental Committee, but when the Bill would be introduced and in which House of Parliament were questions still under consideration.

Notification of Infectious Disease.

The Bill to extend the Infectious Diseases (Notification) Act of 1889 to places which have not already adopted it passed through the Committee stage and was read a third time.

TUESDAY, APRIL 25TH.

Burials Bill

Sir MATTHEW WHITE RIDLEY stated in answer to a question that a Burials Bill was now practically ready and he hoped he might have an opportunity of introducing it during the present session. In the present state of public business, however, he was obliged to refrain from giving any promise on the subject.

Bad Teeth among Army Recruits.

Mr. POWELL WILLIAMS, in answer to Colonel DALBIAC, said that 1767 recruits were rejected in 1898 under the heading, "Loss or decay of many teeth."

FOOD AND DRUGS BILL.

PROCEEDINGS IN THE GRAND COMMITTEE.

THURSDAY, APRIL 20TH.

The Standing Committee of the House of Commons met this day with Mr. JOHN ELLIS in the chair and began the consideration of the Sale of Food and Drugs Bill introduced and promoted by the Government.

The first clause of the Bill deals with precautions against the importation of agricultural produce insufficiently marked, and upon this Mr. STRACHEY moved an amendment the effect of which was to include among the articles to be conspicuously marked margarine "coloured to imitate butter." He insisted that in many parts of this country, and especially in the poorer districts of large towns, this coloured margarine was sold as genuine butter and he considered that people should have the protection offered by a conspicuous mark.

Mr. KEARLEY declined to support the amendment, saying that if the colouring of margarine were prohibited all other forms of colouring would require to be prohibited. Moreover, he understood that the Government were prepared to accede to an amendment inflicting imprisonment in cases of repeated offence against the Act.

Sir CHARLES CAMERON said that he thought it unfortunate that this most important question had been raised on an amendment of very limited application. Both butter and milk were coloured and jam and sugar and many other articles of food, and therefore if they were to deal with colouring they must do so in a much more comprehensive fashion. As for this amendment he might say that the grocers as represented by their Federation were against the prohibition of colouring.

Sir JOHN LENG suggested that in this matter of colouring people might be left to their own judgment and common sense.

Mr. WALTER LONG, President of the Board of Agriculture, who is the Minister in charge of the Bill, said that the view of the Government was that a drastic proposal of this kind could not be justified and should not be enacted unless it could be shown that there was a large amount of fraudulent trading in the country which could not be put an end to without some such clause and unless it could be shown that the clause would strengthen the hands of the authorities without interfering unduly with a legitimate industry. No attempt had been made to prove either of these conditions and therefore he submitted that the amendment was one which the Committee would do well to reject. It was true, as had been stated, that there was a very general feeling in favour of some more rigorous penalties and the Government were prepared to strengthen the Bill in that direction by the inclusion of imprisonment for repeated offences. After careful consideration he had come to the conclusion that if colouring were made impossible and if it were enacted that margarine was to be sold in its natural colour, then for a very considerable period of time the sale of the article would be entirely destroyed.

After some further debate the amendment was rejected by 32 to 11 votes.

On the motion of Mr. STRACHEY words were inserted in the clause making it apply to "adulterated or impoverished cream."

Sir CHARLES CAMERON moved an amendment to introduce a sub-section to include within the operation of the clause any imported "article of food adulterated within the meaning of the Sale of Food and Drugs Act." His object, he explained, was to make the Bill applicable all round, so that any article of food imported in an adulterated form should be examined by the Customs, which he considered was the most effective way of dealing with adulteration.

Mr. KEARLEY, supporting the amendment, said that he did not see why this Bill should be confined to a few agricultural products when so many other products were imported in an adulterated form—such, for instance, as lard adulterated with stearine and flour adulterated with ground rice.

Mr. WALTER LONG said that if this amendment was carried it would largely extend the scope of the measure and among other effects it would increase very greatly the duties of the Customs. The clause already threw upon the Customs considerable duties and the Customs who were the best judges of what they could effectively do had advised him that such an addition to their duties as was proposed in this amendment would impose on them work which they could not efficiently discharge. They must rather depend upon the other parts of the Bill which provided for greater activity in the localities. As it stood the clause simply confirmed what the Board of Agriculture had been doing with regard to the main articles of food.

Sir WILLIAM HOULDSWORTH suggested that the Government might extend the clause to the staple foods.

Mr. WALTER LONG, in reply to this suggestion, said that he would be prepared to consider the case of lard and flour.

Mr. DAVITT thought that the right hon. gentleman might extend his consideration to bacon.

Sir CHARLES CAMERON said that he could not accept the compromise offered. His object was to have it made the business of the Customs to take samples and thus get at adulteration at the port of entry.

Several other members having spoken the Committee divided, when the amendment was rejected by 19 to 16 votes.

Captain DONELAN moved an amendment dealing with the branding of bacon and ham and the use of preservatives, but he did not press it.

Mr. WALTER LONG said that with regard to the use of boric acid medical and scientific opinion was at present that it was not injurious to health. The President of the Local Government Board, however, had decided to appoint at once an expert committee to inquire into the whole question of preservatives, their use, and how far such use was injurious to health.

The Committee then adjourned.

MONDAY, APRIL 24TH.

The Committee met again to-day, with Mr. JOHN ELLIS in the chair, and resumed the consideration of the Bill. After some slight debate it was arranged that instead of going on with an amendment moved by Mr. KEARLEY with regard to the minimum penalty for adulteration the whole question of penalties should be deferred until the Committee reached Clause 14. The Committee accordingly proceeded to the consideration of Sub-section 2 of Clause 1 which was amended so as to read as follows, viz.: "The word importer shall include any person who shall, whether as owner, consignor, or consignee, agent or broker, be in possession of or in any way entitled to the custody or control of the article, and prosecutions for offences under this section shall be undertaken by the Commissioners of Customs and subject to the provisions of this Act. This section shall have effect as if it were part of the Customs Consolidation Act, 1876."

Sir CHARLES CAMERON moved an amendment the effect of which was to give the Local Government Board as well as the Board of Agriculture power to ask the Commissioners of Customs to take samples. His object, he explained, was to stop the importation of articles of food which were diseased and would be injurious to health. He instanced the case of milk and said that it was most desirable that it should be analysed.

Mr. WALTER LONG opposed the amendment, saying that the Local Government Board were convinced that it would not strengthen their hands in the detection and prevention of disease and that this section only dealt with articles with which the Board of Agriculture were specially fitted to deal.

Sir WALTER FOSTER, on the other hand, supported the amendment. He argued that an opportunity was offered here for increasing the usefulness of the Local Government Board in regard to the public health.

Mr. T. W. RUSSELL, Parliamentary Secretary to the Local Government Board, said that the Bill being confined to agricultural articles he did not think it would be wise to give this power to the Local Government Board.

On a division the amendment was rejected by 31 votes to 11.

Mr. WALTER LONG then reminded the Committee of what had happened at the last sitting in regard to the proposal to extend the clause to all imported articles of food and his undertaking to consider the case of flour and lard. He had given the matter his best consideration and he had decided to move during the report stage of the Bill the addition of the following words—viz.: "Any other article of food to which this section may by Order in Council be declared applicable and which is so mixed, adulterated, impoverished, or otherwise altered that the sale thereof by retail without notice of such adulteration would constitute an offence under the Sale of Food and Drugs Act, 1885, except in packages marked as prescribed by Order in Council."

Sir CHARLES CAMERON and other members of the Committee expressed satisfaction with this proposed change.

Mr. ASCROFT moved an amendment giving the Commissioners of Customs power to detain goods while a prosecution was pending.

Mr. WALTER LONG assured the hon. member that such a proposal was impracticable having regard to the perishable character of the articles.

After a short debate the amendment was withdrawn.

Mr. STRACHEY moved the omission of the words "provided that butter or milk shall not be deemed to be adulterated by reason only of the addition of any preservative or colouring matter which does not render the butter or milk injurious to health."

Mr. WALTER LONG pointed out that the clause dealt only with imported articles and said that if preservatives were to be prohibited

the matter should be dealt with in a clause of general application. Further, to accept this amendment would be to anticipate the inquiry of the experts.

Mr. TOMLINSON suggested that the onus of proof that a preservative was not injurious to health should rest upon those who employed it in the preparation of the food.

The amendment, after a long debate, was rejected by 29 votes to five.

Mr. STRACHEY moved to add to the clause: "Any butter, milk, or cream containing any preservative shall be imported as preserved, stating the name of the preservative and the amount per gallon or per pound of such preservative."

This amendment was also rejected, the voting being nine members for and 28 against it.

The Committee then passed to Clause 2, giving power to the Board of Agriculture to sample articles of agricultural produce sold in the country, and in this connexion the Government agreed, after an expression of opinion by the Committee, to extend the power to the Local Government Board.

The Committee thereafter adjourned.

BOOKS, ETC., RECEIVED.

BAUERMEISTER, F., Glasgow.

Die Verletzungen des Auges. Von Dr. E. Praun. 1899. Price 12*s.*

Bericht über die 27. Versammlung der Ophthalmologischen Gesellschaft, Heidelberg, 1898. Price 8*s.* 1899.

Die Diagnose des Farbensinnes. Von W. A. Nagel. 1899. Price 1*s.* 3*d.*

Der Kolpeurynter, seine Geschichte und Anwendung in der Geburtshülfe. Von Dr. R. Biermer. 1899. Price 2*s.* 3*d.*

Handbuch der Gynäkologie. Von J. Veit. 1899. Price 16*s.*

BLACK, A. AND C., Soho-square, London.

Milk: Its Nature and Composition. By C. M. Aikman, M.A. D.Sc. Second edition. 1899. Price 3*s.* 6*d.*

BLAKISTON'S, P., SON, AND CO., Philadelphia.

Manual of Clinical Chemistry. By E. H. Bartley, B.S., M.D. Ph.G. Illustrated. 1899.

CASSELL AND CO., London.

Hygiene and Public Health. By B. Arthur Whitelegge, M.D., B.Sc. Lond., D.P.H. Camb. Illustrated. 1899. Price 7*s.* 6*d.*

CHEMIST AND DRUGGIST Offices, Cannon-street, London.

Practical Methods of Urine Analysis, for Chemists and Druggists. By a Pharmacist. 1899. Price 1*s.* 6*d.*

DAWBARN AND WARD, Farringdon-avenue, London.

The Natural Waters of Harrogate. By F. W. Smith, M.D. Price 1*s.* net. 1899.

GLAISHER, H. J., Wigmore-street, London, W.

Constipation and its Modern Treatment. By G. Herschell, M.D Lond. 1899. Price 2*s.* 6*d.* net.

HIRSCHWALD, AUGUST, Berlin.

Die Physiologisch-Chemischen Grundlagen der Spermintheorie nebst Klinischem Material zur Therapeutischen Verwendung des Sperminum-Poehl. Von Professor Dr. Alexander Poehl, St. Petersburg. 1898.

KIMPTON, H., High Holborn, London.

Ocular Therapeutics. By F. W. M. Ohlemann, M.D. Translated and edited by Chas. A. Oliver, A.M., M.D. Univ. Pa. 1899. Price 7*s.* 6*d.* net.

A Practical Handbook on the Muscular Anomalies of the Eye. By H. F. Hansell, A.M., M.D., and Wendell Reber, M.D. Illustrated. 1899. Price 6*s.* net.

The Practice of Obstetrics. By American Authors. Edited by C. Jewett, M.D. Illustrated. 1899. Price 25*s.* net.

A Practical Treatise on Fractures and Dislocations. By L. A. Stimson, B.A., M.D. Illustrated. 1899. Price 25*s.* net.

KING, P. S. AND SON, Great Smith-street, Westminster.

The Necessity for Criminal Appeal as Illustrated by the Maybrick Case and the Jurisprudence of Various Countries. Edited by J. H. Levy. 1899. Price 10*s.* 6*d.* net.

LANE, JOHN, The Bodley Head, London and New York.

The Mandate. By T. Baron Russell. 1899. Price 6*s.*

LEHMANN, J. F., München.

Geburtshülfliche Taschen-Phantome. Von Dr. K. Shibata. Mit einer Vorrede von Dr. F. von Winckel. 4. Auflage. 1898.

Stereoskopisch-photographischer Atlas der Pathologischen Anatomie des Herzens und der grosseren Blutgefässe. Von Dr. G. Schmorl. 1899.

LEWIS, H. K., Gower-street, London.

The Exploration of the Urethra and Bladder. By M. Tuchmann, M.R.C.S., M.D., Würzburg. Illustrated. 1899. Price 5*s.*

LIBRAIRIE MALOINE, Paris.

Annuaire des Eaux Minérales. Par Dr. G. Morice. 1899.

LONGMANS, GREEN, AND CO., Paternoster-row, London.

Inquiries concerning the Tactics of the Future. (Fourth edition, 1894, of the "Two Brigades.") By F. Hoenig. With one sketch in the Text and three Sketch Maps. Translated by Captain H. M. Bower. With two additional maps. 1899. Price 15*s.* net.

MACMILLAN AND CO., London.

A System of Medicine. Edited by T. C. Allbutt, M.D., F.R.C.P. Vol. vi. 1899. Price 25*s.* net.

MURRAY, JOHN, Albemarle-street, London.

The Art of Dining. By A. Haywood, Q.C., with annotations and additions by Charles Sayle. 1899. Price 5*s.*

OLIPHANT, ANDERSON, AND FERRIER, Edinburgh and London.

Among the Wild Ngoni. Being some Chapters in the History of the Livingstonia Mission in British Central Africa. By W. A. Elmslie, M.B., C.M., F.R.G.S., with an introduction by the Right Hon. Lord Overtoun. 1899.

PENTLAND, YOUNG J., Edinburgh and London.

Outlines of Zoology. By J. Arthur Thomson, M.A. Third edition. Illustrated. 1899.

REBMAN PUBLISHING COMPANY, Shaftesbury-avenue, London.

An American Text-book of Diseases of the Eye, Ear, Nose, and Throat. Edited by G. E. De Schweinitz, A.M., M.D., and B. A. Randall, M.A., M.D., Ph.D. Illustrated. Vols. i. and ii. 1899. Price 42*s.*

SANITARY PUBLISHING COMPANY, Fetter-lane, London.

Modern Drainage Inspection and Sanitary Surveys. By Girard J. G. Jenson, C.E. Illustrated. 1899. Price 2*s.* 6*d.* net.

SCIENTIFIC PRESS, Southampton-street, Strand, London.

Burdett's Official Nursing Directory, 1899: a Directory of Nurses. By Sir H. Burdett, K.C.B. Price 5*s.*

STEINHEIL, G., Paris.

Chirurgie de l'Estomac. Par F. Terrier et H. Hartmann. 1899.

UNWIN, T. F., Paternoster-square, London.

The Oversea Library. The Ipané. By Cunninghame Graham. 1899. Price 2*s.*

WHITTAKER AND CO., White Hart-street, Paternoster-square, London.

Outlines of Physical Chemistry. By A. Reychler, Brussels. Translated by J. McCrae, Ph.D. Heid. Illustrated. 1899. Price 4*s.* 6*d.*

T. J. & J. Smith's Professional Appointment Diary. 1899. No. 49. (T. J. Smith, Son, and Downes, London); price 10*s.* 6*d.*—Executors and Administrators: their Functions and Liabilities. How to Prove a Will. By G. F. Emery, LL.M., Barrister-at-Law. (Effingham Wilson, Royal Exchange, London. 1899); price 2*s.* net.—Transactions of the American Pediatric Society, tenth session. With an index of Vols. i. to x. Edited by F. M. Crandall, M.D. Vol. x. 1898. (Reprinted from the Archives of Pediatrics.) Magazines, &c., for May: Strand Magazine, Boy's Own Paper, Girl's Own Paper, Leisure Hour, Sunday at Home, Ludgate Magazine, Westminster Review, Contemporary Review, Friendly Greetings, Myra's Journal, Pall Mall Magazine, Windsor Magazine, Cornhill Magazine, Blackwood's Magazine, English Illustrated Magazine, Knowledge, Humanitarian, St. Peter's Magazine, The Englishwoman.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week, for publication in the next number.*

ADAMS, D. V. M., M.B., Ch.B. Edin., has been appointed Resident Surgeon to the Glasgow Royal Infirmary.

ANDERSON, J., M.B., C.M. Edin., has been appointed a District Medical Officer, Tynemouth Union.

BATEMAN, F. J. HARVEY, B.A. Cantab., M.B., C.M. Edin., has been appointed House Surgeon to the Leith Hospital.

BAUMANN, E. P., M.B., Ch.B. Edin., M.R.C.S., L.R.C.P. Lond., has been appointed Resident Physician to the Glasgow Royal Infirmary.

CAMERON, A. F., M.B., C.M. Edin., has been appointed Resident Assistant Medical Officer for the Workhouse of the Sheffield Union.

CHRISTIE, B. R. CRAIG, M.B., C.M. Edin., has been appointed Resident Physician to the Glasgow Royal Infirmary.

FOSTER, J., M.B. Edin., has been appointed Clinical Assistant to the Chelsea Hospital for Women.

GASS, R. B., M.B., C.M. Edin., has been appointed Medical Officer of Health by the New Heysham Urban Council.

GIBBONS, H., M.B., C.M. Aberd., has been re-appointed Medical Officer for the Desborough Urban District of the Kettering Union.

GRAHAM, J. W. F., L.S.A., has been appointed Medical Officer for the Piddington Sanitary District of the Bicester Union.

GRIMSDALE, HAROLD B., M.B., B.C. Cantab., F.R.C.S. Eng., has been appointed Assistant Surgeon to the Royal Westminster Ophthalmic Hospital.

HECTOR, C. MUNRO, M.D. Edin., has been appointed Demonstrator of Bacteriology, University College, Sheffield.

HOLLINSHEAD, F., M.D. St. And., M.R.C.S., has been appointed Medical Officer of Health for the King's Norton and Northfield Urban District.

JACKSON, WILLIAM ROY, M.A. St. And., M.B., C.M., has been re-appointed Medical Officer to the Second and Fifth Districts by the Southmolton (Devon) Board of Guardians.

JELLET, W. E., M.B., Ch.B. Edin., has been appointed Resident Surgeon to the Glasgow Royal Infirmary.

JORDAN, H. MARTYN, F.R.C.S., has been appointed Registrar to the Chelsea Hospital for Women.

LAWSON, Dr., has been appointed Medical Officer to the Coleford District by the Frome Board of Guardians.

MARSTON, J. A., C.B., M.D., F.R.C.S. Eng., has been appointed Honorary Surgeon to the Queen, vice Deputy-Inspector-General J. Jee, deceased.

MILLER, J., M.B., C.M. Aberd., has been appointed a District Medical Officer, Tynemouth Union.

MORE, J., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Rothwell Sanitary District of the Kettering Union.

NASMYTH, T. G., M.D. Edin., D.Sc., D.P.H. Camb., has been appointed Examiner in Public Health in the University of St. Andrews.

NIX, R. E., M.B., C.M. Camb., has been appointed Medical Officer for the St. James' Sanitary District of the Bury St. Edmunds Incorporation.

NORMAN, E. P., M.D., B.Ch. Dubl., has been appointed Medical Officer for the Bradfield Sanitary District of the Hardingstone Union.

PARRY, L. A., M.D., B.S. Lond., F.R.C.S. Eng., has been appointed Honorary Anæsthetist to the North-West London Hospital.

PARTRIDGE, THOS., M.R.C.P. Irel., M.R.C.S., has been re-appointed Medical Officer of Health for the Stroud Urban and Rural Districts.

SALMOND, J. L., M.B., C.M. Aberd., has been appointed Medical Officer to the Aberdeen Dispensary, Vaccine, and Maternity Hospital, vice Hunter, resigned.

SIMMONS, G. ALLPRESS, M.D., B.S. Lond., M.R.C.S., L.R.C.P., has been appointed Attending Medical Officer to the Royal Pimlico Dispensary, London.

SYDENHAM, GEORGE FRANCIS, M.R.C.S., L.S.A., has been re-appointed Medical Officer to the Third District by the Southmolton (Devon) Board of Guardians.

THOMAS, A. W., L.R.C.P., L.R.C.S. Edin., has been re-appointed Medical Officer of Health by the Swaffham Urban District Council.

THOMAS, J. T., L.R.C.P. Irel., L.R.C.S. Edin., D.P.H. Irel., has been appointed Medical Officer of Health for Wiltshire.

WILSON, A. GARRICK, M.R.C.S. Eng., L.R.C.P. Lond., has been appointed Junior Out-patient Surgical Officer to the Royal London Ophthalmic Hospital, Moorfields.

Vacancies.

For further Information regarding each vacancy reference should be made to the advertisement (see Index).

ADDENBROOKE'S HOSPITAL, Cambridge.—Resident House Surgeon Salary £65 per annum, with board, lodging, and washing in the hospital.

ASTON UNION.—Resident Assistant Medical Officer at the Workhouse, Erdington, near Birmingham. Salary £100 per annum, with furnished apartments, rations, washing, &c., subject to statutory deduction.

BARNWOOD HOUSE HOSPITAL FOR THE INSANE, Gloucester.—Junior Assistant Medical Officer. Salary £100 per annum, rising to £120 after the first year, with board, &c.

BERKS COUNTY ASYLUM, Wallingford.—Junior Assistant Medical Officer, unmarried. Salary to commence at £120 per annum, rising £10 yearly to £140, with furnished apartments, board, attendance, and washing. £6 per annum allowed in lieu of liquors.

BETHLEM HOSPITAL.—Two Resident House Physicians for six months. Apartments, complete board and washing provided, and an honorarium at the rate of £12 12s. each per quarter will be paid. Applications to the Treasurer, Bridewell Hospital, New Bridge-street, E.C.

BURTON-ON-TRENT INFIRMARY.—House Surgeon. Salary £130 per annum, with a prospect of increase and rooms in the Infirmary free; also coals and gas.

CANCER HOSPITAL (FREE), Fulham-road, S.W.—House Surgeon for six months. Salary at the rate of £50 per annum, with board and residence.

CENTRAL LONDON OPHTHALMIC HOSPITAL, Gray's-inn-road, W.C.—Junior House Surgeon. Salary at the rate of £50 per annum.

CHELTENHAM GENERAL HOSPITAL.—Assistant House Surgeon, unmarried. Salary £80 per annum, with board, lodging, and washing.

COUNTY ASYLUM, Shrewsbury.—Junior Assistant Medical Officer. Salary commences at £130 per annum, rising £10 a year to £150, with board, lodging, and washing (no liquors).

EAST LONDON HOSPITAL FOR CHILDREN AND DISPENSARY FOR WOMEN, Shadwell, E.—Medical Officer for the Casualty Department for six months. Salary at the rate of £100 per annum. Luncheon provided at the hospital.

EPPINGHAM UNION.—Medical Officers for the Cromer District and the Northrepps District. Salaries each £44 per annum, with the usual allowances for extra medical fees, subject to statutory deduction. Applications to the Clerk to the Guardians, Northrepps, Norwich.

GROVE HALL ASYLUM, Bow, E.—Junior Assistant Medical Officer. Salary £120 per annum, with board, lodging, and washing. Personal application to the Medical Superintendent.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton, S.W.—Resident House Physicians.

KING'S COLLEGE, London.—Assistant Dental Surgeon.

LONDON HOSPITAL, Whitechapel-road, E.—Obstetric Registrar.

LONDON TEMPERANCE HOSPITAL, Hampstead-road, N.W.—Assistant Resident Medical Officer for six months. Salary at the rate of £50 per annum, residence in the hospital, with board and washing.

MANCHESTER HOSPITAL FOR CONSUMPTION AND DISEASES OF THE THROAT AND CHEST, Hardman-street, Deansgate, and Bowdon, Cheshire.—Honorary Assistant Physician.

MANCHESTER ROYAL INFIRMARY AND DISPENSARY.—Honorary Ophthalmic Surgeon and Honorary Assistant Physician.

METROPOLITAN EAR, NOSE, AND THROAT HOSPITAL, Grafton-street, Tottenham Court-road, W.—A vacancy on Honorary Medical Staff.

NORTH LONDON HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Hampstead, and Fitzroy-square.—Assistant Resident Medical Officer for the Hampstead Hospital for six months. Honorarium at the rate of £20 per annum. Applications to the Secretary, Offices, 41, Fitzroy-square, W.

NORTHAMPTON GENERAL INFIRMARY.—Assistant to the House Surgeon for six months. Honorarium £25, with board, lodging, and washing.

ROTHERHAM HOSPITAL.—Assistant House Surgeon. Salary £60 per annum, with rooms, commons, and washing.

ROYAL SOUTH HANTS INFIRMARY, Southampton.—Assistant House Surgeon for six months. Honorarium of £10 given, with board and rooms in the Hospital.

ROYAL MINERAL WATER HOSPITAL, Bath.—Resident Medical Officer, unmarried. Salary £100 per annum, with board and apartments in the hospital.

RURAL AND URBAN DISTRICTS IN THE COUNTIES OF LEICESTER, RUTLAND, AND WARWICK.—Medical Officer of Health for the period ending June 30th, 1902. Salary £450 per annum, inclusive of travelling, stationery, and other expenses. Applications to the Clerk to the Joint Committee, Lutterworth.

SEAMEN'S HOSPITAL SOCIETY, Greenwich, S.E.—Three Physicians to In-patients, one Physician to Out-patients, one Surgeon to In-patients, one Surgeon to Out-patients, one Ophthalmic Surgeon. The elected candidates will be appointed for twelve months. The Society also requires for the London School of Tropical Medicine, Royal Victoria and Albert Docks, E., a Superintendent and Medical Tutor for twelve months. Salary £250 per annum, and a capitation on the students to be hereafter determined. Board and residence provided.

STAFFORDSHIRE GENERAL INFIRMARY, Stafford.—Assistant House Surgeon. Salary £50 per annum, with board, lodging, and washing.

STAMFORD HILL AND STOKE NEWINGTON DISPENSARY, 189, High-street, Stoke Newington, N.—Junior Resident Medical Officer. Salary £75 per annum, with board and residence.

STEPNEY UNION.—Medical Officer for the Union Workhouse, St. Leonard's-street, Bromley-by-Bow, E.—Salary £110 per annum, rising £5 annually to a maximum of £130, midwifery and vaccination fees in addition, subject to statutory deduction.—Applications to the Clerk, Offices, Barnes-street, Ratcliffe, E.

STOCKPORT INFIRMARY.—Junior Assistant House Surgeon. Salary £2 per mensem, with board, washing, and residence.

THROAT HOSPITAL, Golden-square, London.—Second Resident Medical Officer. Salary £50 per annum, with board, lodging, and washing.

WEST RIDING ASYLUM, Wakefield.—Assistant Medical Officer as Locum Tenens for one month. Salary £3 3s. per week, with apartments and board.

WREXHAM INFIRMARY.—House Surgeon. Salary £80, with board, washing, and furnished apartments.

Births, Marriages, and Deaths.

BIRTHS.

KENT.—On April 16th, at Lenzie, Dumbartonshire, the wife of R. T. Kent, M.A. Oxon., F.R.C.S., of a son.

MAHOOD.—On April 16th, at Appledore, North Devon, the wife of Allan B. Mahood, F.R.C.S., of a son.

PEARSE.—On April 17th, at Ripley, Surrey, the wife of F. Edward Pearse, M.R.C.S., L.R.C.P., of a daughter.

RENDLE.—On April 20th, at Buckland-terrace, Plymouth, the wife of C. E. Russel Rendle, L.R.C.P. Lond., M.R.C.S. of a son.

WHITE.—On April 22nd, at Upper Richmond-road, Putney, the wife of E. F. White, F.R.C.S., of a son.

MARRIAGES.

BARCLAY—GREENE.—On April 19th, at St. Paul's Church, Clifton Wilfred Martin Barclay, F.R.C.S., youngest son of the late Surgeon-General Charles Barclay, Madras Medical Service, to Madeline, daughter of the late John Greene, of the Abbey Ruins, Bury St. Edmunds.

BLAND SUTTON—HEATHER BIGG.—On April 21st, at St. Marylebone Church, John Bland Sutton, F.R.C.S., of Queen Anne-street, W., to Edith, youngest daughter of Mrs. Heather Bigg, of Radnor-place, W.

COLBY—MANDELL.—On April 19th, at St. Cuthbert's, Haydon-bridge, Carlisle, J. G. Ernest Colby, M.A., M.B. Oxon., F.R.C.S. Eng., of Malton, Yorkshire, to Grace Adela, third daughter of the Rev. J. H. Mandell, M.A., Vicar of the parish.

HOBBS—SHAW.—On April 20th, at Jesmond Parish Church, Newcastle-on-Tyne, by the Rev. C. Triffit Ward, M.A., Vicar of St. Peter's, Colchester, cousin of the bride, and the Rev. T. Brocas Waters, M.A., Allen Holmested Hobbs, M.B., B.S., to Ethel, second daughter of Benjamin Shaw, Newcastle-on-Tyne.

POTTS—MANN.—On April 19th, at St. John's Church, Ladywood, Birmingham, William Alexander Potts, B.A., M.D., eldest son of the late A. W. Potts, M.A., LL.D., of Fettes College, Edinburgh, to Florence, second daughter of W. S. Mann, M.R.C.S., L.S.A., of Edgbaston, Birmingham.

WORTHINGTON—LOWNDES.—On April 20th, at St. Andrew's Parish Church, Enfield, Sidney Worthington, M.D. Lond., F.R.C.S., of Chesterfield, to Alice Livingston Lowndes, granddaughter of the late Joseph Withers, of Burleigh House, Enfield.

DEATHS.

HOGG.—On April 23rd, suddenly, at Palace Gardens-terrace, Kensington, Jabez Hogg, M.R.C.S., F.R.M.S., late of Bedford-square, W.C., in his 83rd year.

HUSSEY.—On April 23rd, at 24, Winchester-road, Oxford, Edward Law Hussey, Esq., F.R.C.S. Eng., aged 83 years.

PRINCE.—On April 22nd, at Crowborough, Sussex, Charles Leeson Prince, M.R.C.S., F.R.A.S., aged 77 years.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

OPERATIONS.

METROPOLITAN HOSPITALS.

MONDAY (1st).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (2 P.M., Ophthalmic 1.15 P.M.), St. Mary's (2.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (2 P.M.).

TUESDAY (2nd).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M. and 6 P.M.), Royal Ear (3 P.M.).

WEDNESDAY (3rd).—St. Bartholomew's (1.30 P.M.), University College, (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), St. Mary's (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.), Westminster (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.), Cancer (2 P.M.).

THURSDAY (4th).—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (1.30 P.M.), St. Mary's (2.30 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.), St. Mark's (2 P.M.).

FRIDAY (5th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), St. Mary's (2 P.M., Ophthalmic 10 A.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (2 P.M. and 6 P.M.).

SATURDAY (6th).—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), University College (9.15 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), St. Mary's (10 P.M.), London Throat (2 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

SOCIETIES.

MONDAY (1st).—ODONTOLOGICAL SOCIETY OF GREAT BRITAIN (40, Leicester-square).—7 P.M. Council Meeting. 8 P.M. Papers:—Mr. C. B. Keetley: Limitation of the Gape after Operations on the Cheek and Jaws.—Mr. M. Collier: Deformities of the Upper Jaw, Teeth, and Palate due to Nasal Obstruction.

ROENTGEN SOCIETY (11, Chandos-street, Cavendish-square, W.).—7.30 P.M. Council Meeting. 8 P.M. Mr. L. Thomas: Fractures of the Forearm (lantern slide demonstration).—Dr. W. Cotton: Slides and Photographs illustrating the Work of a Sectorless Wimshurst Machine.

TUESDAY (2nd).—PATHOLOGICAL SOCIETY OF LONDON (20, Hanover-square, W.).—Prof. J. MacFadyean: Congenital Tubercle in a Calf.—Dr. F. W. Andrewes: Phagocytosis of Red Blood Corpuscles in a Case of Aseptic Suppuration of the Knee-joint following Injury.—Mr. S. G. Shattock: Chromolytic Clumping in Acute Rheumatism and Erysipelas.—Dr. F. E. Batten: Further Evidence on the Pathology of Diphtheritic Paralysis.—Mr. H. J. Waring: Tumour in the Neck composed of Myeloid Cells.—Dr. Still: Tuberculous Ulcers in the Stomach in Children. Card Specimens:—Dr. Batten: Tumour of Spinal Cord in a Child.—Mr. Waring: Adeno-lipoma of Submaxillary Gland.—Dr. Andrewes: Tumour of Socia Parotidis.—Dr. Rolleston: Tumour of Socia Parotidis.—Dr. Rennie: Tuberculosis of Bladder and Kidneys.

WEDNESDAY (3rd).—OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Specimens will be shown by Mr. Targett, Dr. Purslow, and others. Papers:—Mr. A. Doran: Fibroid of the Broad Ligament weighing 44½ lb. (20 kilogrammes) removed by Enucleation, Recovery, with Table and Analysis of 39 Cases.—Dr. C. H. Roberts: Note of a Case of a Large Retroperitoneal Fibroid undergoing Suppuration.

THURSDAY (4th).—OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—8.30 P.M. Clinical Evening. Mr. A. H. Thompson: Tumour of Iris.—Mr. T. Collins: (1) Tumour of Iris; (2) Unusual Opacity of Cornea.—Mr. A. Lawson: Vascular Formation in Vitreous.—Dr. Lediard: Sloughing of Cornea following Fracture of Base of Skull.—Mr. Snell: (1) Primary Intraocular Carcinoma; (2) Traumatic Ptosis.—Mr. Critchett: (1) Solid Œdema of Eyelids; (2) Snellen's Artificial Eyes.—Mr. M. Davidson: Skiagram of Glass in Eyeball.—Mr. Mackay: Skiagram of Foreign Body in Eye.—Mr. Rowan: Carcinoma of Lung and Eye.—Mr. Batten: Filamentary Keratitis. Cases in place at 8 P.M.

HARVEIAN SOCIETY OF LONDON (Stafford Rooms, Titchborne-street, Edgware-road).—8.30 P.M. Mr. C. B. Lockwood: A Series of Cases of Arthrotomy for the Relief of Pain and for the Removal of Synovial Fringes, Loose Bodies, and Fibro-cartilages.

FRIDAY (5th).—WEST KENT MEDICO-CHIRURGICAL SOCIETY (Royal Kent Dispensary, Greenwich-road, S.E.).—8.45 P.M. Dr. M. Dockrell: General Health as a Factor in Skin Diseases. (Presidential Address.)

LARYNGOLOGICAL SOCIETY OF LONDON (20, Hanover-square, W.).—5 P.M. Special Discussion on Asthma in relation to Disease of the Upper Air Passages (to be opened by Dr. P. Kidd and Dr. P. McBride).

WEST LONDON MEDICO-CHIRURGICAL SOCIETY (West London Hospital, Hammersmith, W.).—8.30 P.M. Mr. H. J. Paterson: The Use of Gas in General and Dental Surgery, together with a demonstration of a new Apparatus for the Prolongation of Nitrous Oxide Anæsthesia.—Dr. J. Pardoe: Some Modern Methods of Treating Chronic Urethritis in the Male.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

WEDNESDAY (3rd).—SOCIETY OF ARTS.—3 P.M. Mr. W. H. Preece: Ætheric Telegraphy.

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN (Leicester-square, W.C.).—4.30 P.M. Dr. M. Dockrell: Elementary Lesions of the Skin and their Differential Diagnosis. (Post-graduate Course).

THURSDAY (4th).—CHARING-CROSS HOSPITAL.—4 P.M. Dr. Green: Medical Cases in the Wards. (Post-Graduate Class.)

Notes, Short Comments, and Answers to Correspondents.

EDITORIAL NOTICES.

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention be given to this notice.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Lectures, original articles, and reports should be written on one side of the paper only, AND WHEN ACCOMPANIED BY BLOCKS IT IS REQUESTED THAT THE NAME OF THE AUTHOR, AND IF POSSIBLE OF THE ARTICLE, SHOULD BE WRITTEN ON THE BLOCKS TO FACILITATE IDENTIFICATION.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *should be addressed "To the Manager."*

We cannot undertake to return MSS. not used.

MANAGER'S NOTICES.

TO SUBSCRIBERS.

WILL Subscribers please note that only those subscriptions which are sent direct to the Proprietors of THE LANCET at their Offices, 423, Strand, W.C., are dealt with by them? Subscriptions paid to London or to local newsagents (with none of whom have the Proprietors any connexion whatever) do not reach THE LANCET Offices, and consequently inquiries concerning missing copies, &c., should be sent to the Agent to whom the subscription is paid, and *not* to THE LANCET Offices.

Subscribers, by sending their subscriptions direct to THE LANCET Offices, will ensure regularity in the despatch of their Journals and an earlier delivery than the majority of Agents are able to effect.

The rates of subscriptions, post free, either from THE LANCET Offices or from Agents, are:—

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SUBSCRIBERS ABROAD ARE PARTICULARLY REQUESTED TO NOTE THE RATES OF SUBSCRIPTIONS GIVEN ABOVE. It has come to the knowledge of the Manager that in some cases higher rates are being charged, on the plea that the heavy weight of THE LANCET necessitates additional postage above the ordinary rate allowed for in the terms of subscriptions. Any demand for increased rates, on this or on any other ground, should be resisted. The Proprietors of THE LANCET have for many years paid, and continue to pay, the whole of the heavy cost of postage on overweight foreign issues; and agents are authorised to collect, and do so collect, from the Proprietors the cost of such extra postage.

The Manager will be pleased to forward copies direct from the Offices to places abroad at the above rates, whatever be the weight of any of the copies so supplied. Address—THE MANAGER, THE LANCET OFFICES, 423, STRAND, LONDON, ENGLAND.

THE MEDICAL PROFESSION AND THE STORES SYSTEM.

WE have received from a correspondent a letter in which he calls attention to a matter of which we have already taken notice—namely, the fact that certain Stores are able by arrangement with medical men to offer to their customers medical attendance at a reduced tariff. Our correspondent having found an advertisement in the list of the Stores in question which stated that arrangements beneficial to members had been entered into with certain practitioners, wrote and asked for the names and addresses of the medical men in question. The answer which he received from the Stores has puzzled us considerably, as one of the medical men to whom he was recommended to apply for advice and treatment has been dead for a long time, a fact which suggests that he was consulting an ancient Stores list, while his letter expressly mentions that the correspondence occurred "the other day," and the Stores' secretary's letter was dated March 28th, 1899.

The current list of the Stores in question contains the following notice to members:—

MEDICAL.

Special Arrangements beneficial to Members have been made with several Medical Practitioners. Particulars may be obtained on application to the Secretary.

When the subject was previously under notice in our columns we said that we could well believe that members of the medical profession had entered into arrangements without much consideration that seemed to us to be open to very obvious objections. We think so now. Such arrangements involve advertisement of the names of practitioners to the patients of other practitioners promiscuously. We feel sure that the gentlemen whose names are so published would not publish their names on any private circular for distribution to the patients of other practitioners. Secondly, there is no need whatever, in our opinion, for the concessions offered by the Stores to their members. Private practitioners are quite ready to make every allowance in those cases where the means of their patients are limited. The tendency of such arrangements as those which the Stores invite their members to enter upon with medical men is to attract shabby or ungenerous persons who wish to pay less for their medical attendance than they can afford. Evil is notoriously often wrought by want of thought, and we make these criticisms in confidence that they will be well received by those concerned, and with the conviction that arrangements with Stores to supply medical service are entirely out of place and derogatory to the dignity and fraternity of our profession.

We made comments almost identically to this effect some four years and a half ago (THE LANCET, Sept. 8th, 1894) and we then received a letter signed "Oculist," the writer of which put before our readers with some plausibility his reasons for thinking that, as far as his branch of the medical profession was concerned, these arrangements with Stores were correct. In "Oculist's" opinion no advertisement of the practitioners recommended by the Stores was involved in the arrangement between these gentlemen and the Stores, "because neither the name nor the fee can be ascertained except upon inquiry." We did not and do not agree. The answer to such inquiries is an advertisement—and a very good advertisement—for the oculist of whom the name and address are given. The information is not furnished under seal of secrecy and is sure to be disseminated. Next, "Oculist" thought the arrangements unobjectionable because the specialist would receive under them the fee which "will nearly always be accepted if circumstances are pleaded." Again we did not and do not think much of his argument. Charity is the greatest pleasure to many, nay, to most, of the medical profession, but the members of the profession ought to be allowed to dispense their own charity. Every person who is a member of the Stores does not *ipso facto* become a proper object to be seen by an oculist at half price, the special circumstances pleaded—viz., the possession of a Stores ticket—not being in our opinion such as should move the most sensitive oculist to compassion. We cannot see that the specialist's position differs from that of the general surgeon or physician in the least, and every member of the medical profession will feel that such arrangements as those under discussion are undignified and nearly, if not quite, unprofessional. However discreetly the announcement in stores' lists may be made the fact remains that medical service is not a commodity which should be offered by trading corporations to the community at reduced prices, and we regret that medical men should be found to take any other view.

SUPERFLUOUS HAIR.

To the Editors of THE LANCET.

SIRS,—If any of your readers who can speak from experience in reference to the treatment of superfluous hair would give me their advice I should be exceedingly obliged. A young lady, 26 years of age, of great beauty, and whose attractiveness of character as well as of features gives her entrance to society wherever she goes, is afflicted with a growth of hair on the upper lip. She is developing a moustache of a dark colour and it is now about one-eighth of an inch long. It is slowly growing and is a matter of annoyance and anxiety to her friends as well as to herself. In the circumstances it is most desirable that such a disfigurement should be removed. I have by me Dr. Balmanno Squire's excellent little book on "Superfluous Hairs," and although he dwells at considerable length on its treatment by electrolysis he still describes it "on the whole a successful method" and admits that it is a tedious and painful process. I am unwilling to subject my young friend to this ordeal unless I can be assured that it is the best and a certain remedy, and before doing so I am most anxious to have the opinion of others in regard to this mode of treatment or any other which they may consider better. I hope this letter may bring me some assistance.

I am, Sirs, yours faithfully,

April 24th, 1899. M.D.

A CORONER UPON MEDICAL EVIDENCE AT INQUESTS.

THE following paragraph is extracted from the *Northern Daily Telegraph* of April 24th and is a curious confirmation of the remarks which we made in these columns a week ago.

SUDDEN DEATH OF A COLNE PREACHER.
CORONER AND THE DOCTORS.

To-day Mr. Robinson, coroner, held an inquest at the Town Hall, Colne, on James Holgate, aged 65 years, a local preacher, of 2, Gosling-yard, Colne. Deceased had been a soldier and afterwards a general dealer. Latterly he had lived on a small competency. To the time of his death, 1.15 A.M. last Friday, he appeared to enjoy the best of health. At the time named his wife found him walking about the bedroom rubbing himself, and shortly afterwards he flung himself on the bed and died. After the widow had given evidence a juryman suggested that medical evidence should be called.—The Coroner: If you have a post-mortem you must have a doctor. If the doctor only sees the dead after death he can give no more scientific evidence than you can. I should not like my relatives to be cut up and mauled by doctors.—A verdict of "Death from natural causes" was returned.

If this brief account of the proceedings at the inquest upon James Holgate is substantially accurate we have no hesitation in saying that the coroner showed himself to have no real grasp of his business. Here is a man no reason for whose sudden death is suggested. After the widow's evidence a juryman asks for medical evidence, and it would seem very properly. His request is pooh-poohed by the coroner sitting to find out the cause of death for two reasons: (1) that a medical man can give no more scientific evidence than a layman when a man is dead, which is not correct; and (2) that he (the coroner) would not like to have his relatives cut up and mauled, which is silly. Now, coroners are judges and should not be inaccurate or silly in their judicial capacity.

THE CREED OF THE SPIRITUAL HEALER.

THE *Critic* publishes some amusing verses on the creed of the spiritual healer. Two members of this sect, which seems to be another name for the Christian Scientist, have informed an interviewer that to keep in good health "what you want to do is to think that you can't be ill. Try and (*sic*) remember that the body is nothing." The poet of the *Critic* after musing on the foolishness that has beset men who for generations have suffered and even died without using so easy a therapeutic measure sings thus:—

* * *

For the body's nought at all;
Rich and poor and great and small,
Thin and fat,
Man is nobody; you'll note
There is nothing in his coat
Or his hat.

Should you lose your legs, anon,
Never think of grafting on
Legs of cork;
Don't believe you're even lame,
Put your boots on all the same,
Rise and walk!

* * *

Never work and ne'er be sad;
Hunger 's nothing but a fad;
Feed the mind.
When on nothing you are cloyed,
If you feel a kind of void—
Think you've dined.

* * *

THE PIGMIES OF CENTRAL AFRICA.

ON April 13th at the Camera Club in Charing Cross-road Mr. Alfred Lloyd of the Church Missionary Society gave an interesting account of a journey through the Central African forest where the pigmies live. This forest lies immediately to the west of the Mountains of the Moon and is almost continuous with the lower slopes of these mountains. He was in the forest a day or two without meeting pigmies; the first one he saw was perched in a tree and was for a moment supposed to be a monkey. Several of them, headed by a chief, soon came to him in a friendly manner and he was able to converse with them quite freely in the language spoken in the country of Toro to the east of the Mountains of the Moon. He gathered from them that they were from 8000 to 10,000 in number and that the size of their forest reckoned in days' journeys was about 100 miles in breadth by from 100 to 200 miles in length. The majority of the pigmies were under four feet in height. He was not able to measure them individually, but he arrived at this estimate by finding that any of them could stand under his arm. Although well provided with photographic materials he was not able to take likenesses of them because they had a great objection to come into any open space

such as where a river flowed, and in all the other parts of the forest owing to the luxuriance of the vegetation the light was no greater than twilight, so that it was insufficient for a snapshot with a camera and none of the pigmies could be induced to remain still for the time necessary for a long exposure. Although so short in stature they were extremely muscular. On their arms they wore bangles which were retained in position by the protuberance of the biceps muscle and Mr. Lloyd when he tried on their bangles found that they were much too large to fit his arms. At his first meeting them he had but little fresh meat and they brought him a fine antelope the same day. He obtained from them specimens of bows, arrows, spears, and horns for producing sound, lantern views of all of which were shown on the screen. Vegetable creeper was used for the bow-strings and pieces of leaf for the "feathers" of the arrows; the horns were made of elephant's tusk. When the arrows were poisoned they caused almost instantaneous death. Mr. Lloyd was not able to ascertain the nature of the poison. He was told that it was made by mixing putrid meat and red ants, but he doubted the accuracy of the information.

A SAD CASE.

To the Editors of THE LANCET.

SIRS,—Can any of your readers inform me of any home where a young girl, 15 years of age, could be placed? She is three months pregnant by her own father, and it would be advisable to remove her from her present surroundings as soon as possible.

I am, Sirs, yours faithfully,

April 19th, 1899. MEDICUS.

A STOCKING SUSPENDER.

THE "Portia" combined stocking suspender and shoulder support consists of one long piece of elastic pink webbing three-quarters of an inch wide, the middle of which forms two loops, one to go over each shoulder and under the arms. These loops meet in a special centre clip or crossing buckle in the middle of the back and from this the usual elastic bands pass down to the stockings. This suspender is very simple in use, completely avoids the injurious compression of the limbs caused by garters, and has the further advantage that the stockings are held up not from the waist but from the shoulders. The makers are the "Portia" Company, 202, Romany-road, West Norwood, Surrey.

SIR WILLIAM JENNER'S FORTUNE.

IN a recent article, in alluding to Sir William Jenner's will, we mentioned that a certain proportion of his money was derived from relatives. We are now informed that the accessions to his wealth received in this way consisted only of the sum of £3000 and his house at Bishop's Waltham. So that substantially Sir William Jenner made his own fortune. His investments were always judicious.

A REMARKABLE PLAGUE OF FLEAS.

A CORRESPONDENT asks whether we can give him any information on the following matter. A friend of his has a house which, by the carelessness of a dirty tenant, became infested with fleas. One room especially was affected, and when a new tenant took the house the floor of the room was relaid but without appreciable effect. By leaving the room empty and constantly washing with strong carbolic the nuisance was kept within bearable limits, but when the last tenant left the plague increased again. The empty house has been twice powerfully fumigated, with doors and windows stopped, but this has not cured the trouble. Can any of our readers suggest anything effectual in such an aggravating case?

"THE FUND FOR THE RELIEF OF THE WIDOW OF THE LATE MR. H. KINGSLEY HUNTER, L.S.A."

To the Editors of THE LANCET.

SIRS,—The undermentioned donations have been received, making a total of £36 1s. 6d.

I am, Sirs, yours faithfully,

RIVERS WILLSON, Treasurer.

42, Wellington-square, Oxford, April 25th, 1899.

	£	s.	d.		£	s.	d.
Dr. Latham, Cambridge...	5	5	0	Dr. A. G. Bateman	1	1	0
Mr. Joseph Smith	1	1	0	F.R.C.S. Eng.	0	10	6

"WANTED A HOME FOR AN EPILEPTIC."

To the Editors of THE LANCET.

SIRS,—Your correspondent in THE LANCET of April 22nd, Dr. J. Ross MacMahon, should apply to Mr. G. Penn Gaskell, 12, Buckingham-street, W.C., the secretary of the National Society for the Employment of Epileptics, from whom he will obtain particulars and the necessary papers for admission into the society's colony at Chalfont-St.-Peter, Bucks.

I am, Sirs, yours faithfully,

Queen Anne-street, W., April 22nd, 1899. W. ALDREN TURNER.

A QUESTION OF ETIQUETTE.

To the Editors of THE LANCET.

SIRS,—In the next issue of THE LANCET would you be good enough to give your opinion of the etiquette concerned in a case the facts of which I append. A. B. is in attendance on a patient. On a certain day at 6.15 P.M. a messenger comes from a patient to A. B. saying that the patient's brother is bringing his doctor, Y. Z., to see the patient, that the train by which they are coming is shortly due, and that they will arrive at the patient's house at 6.45; could A. B. meet Y. Z. at that hour? A.B. says he cannot, but that Y. Z. may examine the patient if he wishes and call on A. B. afterwards. In an hour's time Y. Z. calls on A. B. and discusses the case, but offers no explanation of his conduct. On the next day A. B. sees his patient and makes final arrangements for the performance of a small operation on the morrow. Some few hours after the said visit the patient's mother calls on A. B. and informs him that the patient's brother has removed the patient to his own house and placed her under the care of Y. Z., who takes over the treatment of the case.

I am, Sirs, yours faithfully,

April 25th, 1899. A. B.

*** Y. Z. should, if possible, have arranged to meet A. B. to discuss the patient's condition and treatment with him. At the interview he should have told A. B. of the intended transfer of the patient to him. He cannot be held responsible for the wishes of the patient or of the patient's friends.—ED. L.

Foreign Diploma.—The Act (the Medical Act, 1859) says that a person "not a British subject who shall have obtained from any foreign university a degree or diploma of Doctor in Medicine and who shall have passed the regular examinations entitling him to practise medicine in his own country" shall be allowed to act as "resident physician or medical officer of any hospital established exclusively for the relief of foreigners in sickness, provided always that such person is engaged in no medical practice except as such resident physician or medical officer." Under certain circumstances, however, the possessors of foreign medical diplomas can be registered for colonial practice (49 & 50 Vict. c. 48). The fee for such registration is £5. The question should be submitted to the Registrar of the General Medical Council, 299, Oxford-street, W.

Enquirens.—The possessor of the degree of Ph.D., like the possessors of the degrees of LL.D., Mus.D., D.Sc., or D.D., is a "doctor" and has the right to style himself so on his door-plate and visiting-card. We do not gather that the gentleman in question is pretending to be a medical "doctor," so that there is no question of his contravening the Medical Acts. Our correspondent's doubts as to the possession of a medical qualification can be cleared up by consulting the Medical Register.

Queen's Hotel.—We do not recommend specialists or any practitioners by name. Our correspondent should ask his medical man if a second opinion is required and whose services he would recommend under the circumstances.

Physician.—Speaking generally we think that the officers in question and their families should receive the gratuitous attendance that is always placed by the profession at the disposal of brother practitioners.

E. D. C. (Walton).—His services must be limited to dispensing and giving such assistance as is permitted under the recent regulations of the General Medical Council (*vide* THE LANCET, Nov. 27th, 1897, p. 1424.

Ethics.—The publicity is unfortunate, but we do not see any evidence that the medical man in question is responsible for the paragraph.

N. Y. Z.—Yes. The medical man invariably tries to spare the nurse the task, but in many circumstances it will be her duty.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, April 27th, 1899.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Rainfall.	Solar Radiation in Vacuo.	Maximum Temp. Shade.	Min. Temp.	Wet Bulb.	Dry Bulb.	Remarks at 8.30 A.M.
April 21	29·92	S.	0·11	66	43	45	45	46	Raining
,, 22	30·20	E.	0·20	80	50	37	41	43	Cloudy
,, 23	30·31	S.W.	0·05	102	56	42	44	47	Cloudy
,, 24	29·84	S.W.	0·03	99	57	46	47	51	Overcast
,, 25	29·47	S.W.	0·30	99	58	48	51	52	Cloudy
,, 26	29·52	N.W.	0·26	91	56	45	46	49	Cloudy
,, 27	29·91	N.E.	...	68	55	48	48	51	Cloudy

During the week marked copies of the following newspapers have been received: *Gloucester Journal, Huddersfield Chronicle, Whitehaven Advertiser, Kilmarnock Herald, Hawick Advertiser, Manx Sun, Montrose Review, Leeds Mercury, Times of India, Pioneer Mail, Caithness Courier, Peterhead Sentinel, Architect, Citizen, Scotsman, Builder, Liverpool Daily Post, West Lothian Courier, South Durham Mercury, East of Fife Record, Warwick Times, Bristol Mercury, Macclesfield Courier, Dunoon Herald, Wakefield Herald, Jarrow Express, Normanton Herald, Stockport Advertiser, Newcastle Journal, Yorkshire Post, Nottingham Guardian, Manchester Courier, Pontefract Telegraph, Coventry Herald, Colchester Telegraph, Cheshire County News, Fife News, Public Health, Sanitary Record, Brighton Gazette, Local Government Chronicle, Mining Journal, Reading Mercury, City Press, Hertfordshire Mercury, North London Echo, Surrey Advertiser, Southport Visiter, China Mail, Herald Standard (Melbourne), The Clarion, Local Government Journal, Weekly Times and Echo, Northern Daily Telegraph, Durham Chronicle, Liverpool Journal of Commerce, Birmingham Gazette, Oxford Times, Weston-super-Mare Gazette, Morning Herald, Mandalay Herald,* &c., &c.

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